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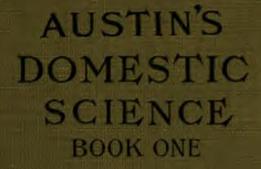
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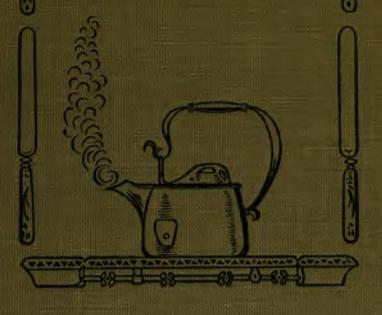
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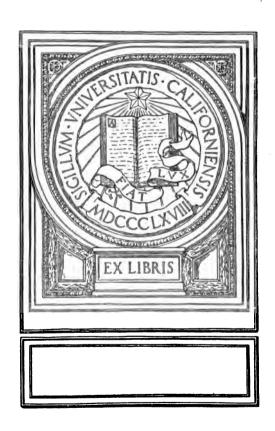
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LYONS & CARNAHAN



XP France's

DOMESTIC SCIENCE

BOOK ONE



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MATERIAL COLLECTED BY A COMMITTEE OF DOMESTIC SCIENCE TEACHERS CO-OPERATING FROM DIFFERENT SECTIONS OF THE COUNTRY.

LYONS & CARNAHAN
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TO VINU ALIFORNIA

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PREFACE

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The young woman who learns to play by ear a few simple tunes is in no sense a musician; neither is the young woman a cook who learns a few simple ways to cook meat and potatoes. Something more is required. The principles of cookery are more than the practice. Without belittling the deftness and mechanical perfection that come only through long experience, the cook who does not know the whys and wherefores of the processes she follows, is no more to be regarded as an educated cook than the man who rotates his crops without knowing why, is to be regarded as an educated farmer. A blind following of any rule or even custom is sure to result sooner or later in fatal mistakes, and nowhere is this truer than in the kitchen.

This does not mean that the elaborate and expensive "made" dish is at all necessary to any nourishing and palatable fare. Other things being equal, economical cooking is apt to be the best cooking. For this reason, economy has been constantly in mind in the preparation of these lessons.

The authors have attempted to be clear-cut and concise in the presentation of the lessons, and have at the same time tried to make the work attractive and easy to understand by illustrating freely with up-to-date appliances and ideas. While proceeding from the simple to the more complex and from the easy to the more difficult problems, they have also kept in mind the seasons of the year when required supplies can most readily be procured. There are two reasons for this; first, economy, and second, the value to the student of being taught to use materials in season.

Another purpose kept in view has been to make the work practical for ordinary, everyday people, for they constitute the great majority in this and every other nation. By this it is not meant that all daintiness and attractiveness have been excluded. These qualities have received consideration in as far as they are obtainable without the sacrifice of economy and nutritive value. To this end each lesson has been supplemented with some information as to the most attractive and palatable serving of the dish taught.

The complete series comprises three books. The first two books are designed for use in the first and second years of the course, and the third in the third and fourth years. The work has been so planned that pupils who must leave school before taking the last book will have gained a knowledge of the fundamentals and acquired the practical ability to cook meats, vegetables, and desserts in their simpler forms. They will also have learned how to buy meats and vegetables and have a knowledge of nutritive values that will enable them to practice the art of cookery with intelligence.

If there be any claim to originality in these books, it is in the reading lessons, in which the attempt has been made to treat the subject of cookery in an intimate personal manner and to touch upon the history and literature of cooking. This has been done briefly and yet with the hope of adding color and genuine value to a subject that might otherwise prove monotonous.

The main purpose throughout has been to inspire girls with respect for cooking and a love of cooking as an art and as a science, for it is both.

The equipment for teaching Domestic Science in schools of various kinds is not treated in this work, inasmuch as this subject is of interest only to teachers and supervisors. A monograph by Helen Kinne, entitled *Equipment for Teaching Domestic Science*, which gives a very thorough exposition of the subject, may be obtained from Teachers' College, Columbia University, New York City.

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Cookery means the knowledge of Medea, and of Circe, and of Helen, and of the Queen of Sheba. It means knowledge of herbs and fruits and balms and spices and all that is healing and sweet in the fields and groves, and savory in meats. It means carefulness and inventiveness and willingness and readiness of appliances. It means the economy of your grandmothers and the science of the modern chemist; it means much testing and no wasting; it means English thoroughness and French art and Arabian hospitality; and, in fine, it means that you are to be perfectly and always ladies—loaf givers.—Ruskin.

DOMESTIC SCIENCE

Lesson I

COOKING (Reading)

It took many centuries for man to learn how to provide for himself comfortable shelter, food, and clothing, and a still longer time to make of his shelter a home furnished with conveniences for living, eating, and sleeping, such as we now enjoy. In times of old there were no dishes, for instance, but people by degrees learned to make them by hollowing out pieces of wood, then by shaping and drying clay and then by shaping metals.

Wild fruits, berries, roots, and the like, eaten in their raw state, were the first food of man, and when the flesh of animals became a part of his diet, it also was eaten uncooked. It may have been accidentally discovered that heat applied to some foods improves their flavor, but, at any rate, the preparation of food for eating by means of cooking was a later development.

Charles Lamb's well-known account of the origin of roast pig may be the product of his fancy, but it is well known that roasting was the first cooking process known to mankind. Later, people learned to wrap raw food in skins and leaves and bake it among red-hot stones or in the ashes. Still later, they found out that placing raw food in water which had been heated by dropping into it hot stones also made the food more palatable, and thus the art of boiling came into use.

From these crude beginnings has sprung the modern art of cookery, an art which reveals more than two hundred ways of cooking eggs, to say nothing of the hundreds of ways of preparing and combining other food stuffs with appetizing results. In order to understand well the lessons in cooking and allied subjects which are to follow, it is necessary first to know the main uses of food and the reasons for cooking food.

There is an old saying that we should not "live to eat, but eat to live." The noted English author, Sydney Smith, once wrote to a friend:

"Having ascertained the weight of what I could live upon so as to preserve health and strength, and what I did live upon, I found that between ten and seventy years of age I had eaten and drunk forty-four wagon loads of meat and drink more than would have preserved me in life and health! The value of this mass of nourishment I considered to be worth seven thousand pounds, sterling. It occurred to me that I must, by my own voracity, have starved to death fully a hundred persons. This is a frightful calculation, but irresistibly true."

While it is true that we must eat if we would live, it is also true that the function of food in the body is not merely to keep it alive. Food in proper quantities and of the right quality supplies heat to the body and gives it energy and force whereby it may do needed tasks. Food replaces worn out cells and tissue and thus causes the body to grow and remain strong.

Some foods, for instance, fats, produce more heat than others, such as fruits; consequently we find the Eskimos, who live in a cold country, living upon a diet of the former, while the natives of the Philippines are satisfied to make the latter their chief food.

The tissue-building foods are lean meats, the whites of eggs, part of milk, part of flour, and some vegetables, such as peas, beans, and lentils.

The kind and amount of food a person requires depend upon his age, his work, his health, the time of year, and the climate.

Of the many reasons for cooking food rather than serving it in its raw state, perhaps the most important is the fact that cooking renders most food more easy to digest, by changing its structure, putting it into a form which enables the tissues of the body to take what they need for renewal and growth.

The flavor and odor of many foods are brought out by cooking and thus the appetite is tempted to a greater degree than when the food is raw. Add to this the fact that foods will keep longer in a cooked state and we have the principal reasons for practicing this modern art.

Serving the meal in early times was perhaps even more crude than the preparation of the food for eating. Usually each one helped himself and to the strongest naturally fell the choicest morsels. A step in advance of this is the method which is practiced by the Eskimos today. A dish containing the food is set in the midst of the family and from this each one helps himself. From this to the refined way of serving the prepared food on tables covered with dainty white linen and decked with glass, silver, and china, with napkin and finger bowl at hand to insure cleanliness and comfort is a long step.

ARRANGEMENT AND CARE OF THE LABORATORY

Before taking up the actual work in the cooking laboratory, there are several topics which need to be considered:

- 1. Dress and care of the person for laboratory work
- 2. The laboratory (or kitchen)
 - (a) Lighting and ventilation
 - (b) Order and cleanliness
 - (c) Utensils

Number and kind Arrangement Care of

1. It is a well known fact that odors seem to cling to woolen cloth. Add to this that such cloth cannot be easily washed and cleaned, and the unfitness of such material for laboratory or kitchen wear is readily seen. Washable dresses are the only suitable ones for such work. If long sleeves are worn, they should be protected by oversleeves also made of tub goods. An apron as long as the dress skirt, made with a bib, should be of

white goods. The costume is prettier if the oversleeves and the apron are of the same material.

The hair should be carefully dressed so that no loose hairs are flying, or a cap similar to a dusting cap may be worn, the latter being the safer way.

No rings or bracelets should be worn during the laboratory period as they are in the way and also are likely to retain any dirt that gets on them.

When entering the laboratory, the hands should be washed with soap and water and the nails carefully cleaned. It is well to keep a damp hand towel at hand (it may be pinned to the belt) to wipe the hands upon when necessary. To use the apron or dish towel for this purpose is untidy and unsanitary.

- 2. (a) The laboratory or kitchen should be well lighted and ventilated. Sunshine, beside making the work easier and more pleasant, helps to purify the air. Plenty of pure air in circulation is necessary to keep the room free from offensive odors. No odors of previous cooking should greet a person entering the room.
- (b) The desk or table and everything in the laboratory, including the stove and oven, should be kept in perfect order and cleanliness. Each utensil should have its place and be kept there when not in use. "A place for everything and everything in its place," is a motto which, if followed, would save the housewife much time and energy.

Since each laboratory will have its own desk arrangement, no

Sauce pan Frying pan		Strainer		
Dinner plate Tin plate		Sm. plate		
Large bowl	Sm. bowl	ng pin	eater	
White cup	Measuring cup	Rolling	Egg b	

Fig. 1

set rules as to the placing of utensils can be given, but a suggestion may be helpful. There is usually an inclosed shelf under the desk, and the dishes commonly used may be on this shelf according to the accompanying, or some similar arrangement.



A large drawer at the side may be arranged in the manner shown in Figure 2.

The pad for hot dishes and a match-box should be on top of the desk.

Under the shelf there may be a space where the dishpan and stool may be kept, and under the drawer a place for the gas or oil-stove oven. The more modern desks, however, have a sliding seat and have an oven attached above the desk adjusted so as to swing

Uniform	
Hand-towel	
Holder	
Partition	••
Wire egg beater	
Wooden spoon	
Case knife	
Paring knife	
Fork	
Teaspoon	

Fig. 2

back out of the way when not in use. Figure 3 shows one of the best of the late models for these desks. It has the enclosed shelf for utensils below, sliding seat, sliding work-shelves, drawers, and gas plates.



Each two girls usually have one dish towel and one dish washer between them. At the end of the laboratory period, these should be thoroughly washed in soap and water, rinsed, and carefully and neatly hung in a light airy place to dry.

Lesson II

BAKED APPLE

Materials used:

Tablespoon, tb, = 3 teaspoons, or 192 drops. When not otherwise specified, a tablespoonful means a *level* tablespoonful.

Medium-sized apple

1 tb boiling water

2 tb sugar

3 tb cream

Utensils needed:

Paring knife or corer case knife and fork small granite pan saucepan egg beater (Dover) tablespoon vegetable brush

Work to be done:

1. Wash the apple in clean water with a vegetable brush; take out the core either with the paring knife or with the corer,



Fig. 4.—Coring the Apple

holding the apple in the left hand in such a way that the stem end is in the space between the thumb and the first finger, and the blow end is in the space between the thumb and the little finger. This manner of holding prevents any danger of the knife's slipping and cutting the hand.

2. Place the cored apple on the granite pan. Measure 2 tb sugar; to do this, dip up as much sugar as the

spoon will hold, then level it off with the case knife. Pour the sugar over the cored apple.

3. Put a little water in the saucepan and heat it to the boiling point. Pour 1 th of this into the pan with the apple.

4. Place the apple in a moderately heated oven and bake for 20 or 30 minutes, or until it is tender enough to be pierced

easily with a fork. While it is baking, baste the apple several times, that is, dip up some of the syrup formed in the pan by the sugar, water, and juice of the baking apple, and pour it over the apple. This keeps the apple from becoming dry on the top and burning.

5. When done, carefully remove from pan, place on a dessert plate and set away to cool.

Principles:

The substance of an apple is a form of sugar.



Fig. 5.—Leveling off tablespoonful

This is contained in a large number of little cavities, known as cells. The walls of these cells and the framework holding the cells together are made up of a paper-like substance, called cellulose. Cellulose is woody and will not dissolve in water, but it has been found that moist heat will break it down. This is what happens in the baking of the apple.

Besides sugar and cellulose there is a great deal of water in an apple, which in combination with the heat of the oven causes the walls of cellulose to break down, setting free the sugar, the nourishing part of the apple, thus making it more easily acted upon by the digestive juices.

Baking also changes the flavor of the apple, making it more pleasing to some people.

Serving:

Measure 3 tb cream into a bowl and beat with a Dover egg beater until stiff. To prevent the cream from spattering, take a piece of wrapping paper a little larger than the top of the bowl, cut a slit to



Fig. 6.—Dover Egg Beater.

the center, and fit it around the narrow part of the egg-beater.

If it has not already been done, place the apple when cool on a dessert plate and pour the whipped cream over it and serve.

This makes a good breakfast or luncheon dish and may also be served as a simple dessert for dinner. Table manners:

The days when everyone seized his food and devoured it in the quickest time have passed away,

and no surer index can be found to breeding than the manner in which one eats.

The baked apple just described may be eaten with a teaspoon, but preferably with a fork. Begin at the center and eat only the pulpy part, leaving the skin on the plate.

Rule: A spoon is used only for food too soft to be easily handled with a fork.

Setting the table:

Lay the pad, or silence cloth, on the table. This should be about three inches larger than the table on all sides. It should be pulled tight over the table, folded square at the corners, and pinned underneath. This cloth prevents noise, protects the table from injury from hot dishes, improves the appearance of the linen, and saves it from wear.

Cleaning up:

- 1. As soon as the apple is taken from the baking tin, pour hot water into the tin to dissolve the sticky substance formed from the sugar and water.
- 2. As soon as the cream has been whipped, rinse the eggbeater in hot water, being careful not to wet the cogs of the wheel.

- 3. Prepare two pans of water, one with hot, soapy water and the other with hotter clear water for rinsing. In order to save the hands use the dish washer as much as possible instead of a cloth. Much hotter water can be used if this is done.
 - 4. Wash the dishes in the following order:
 - (a) glass

- (c) china
- (e) granite or tin

(b) silver

- (d) crockery
- (f) kitchen utensils

The dishes should be thoroughly dried and carefully put away in their proper places.

What has been learned:

- 1. Apples are composed of a sugar-like substance, cellulose, and water.
- 2. Moist heat will break up the cellulose and thus soften the apple.
 - 3. Baking thus makes an apple easier to digest.
 - 4. Baking also changes the flavor of an apple.

VEGETABLES

Lesson III

MASHED POTATO

Materials used:

1 teaspoon, tp, = 64 drops.

1 potato 2 tb milk 1 to butter

1 tp salt

Utensils needed:

Granite pan with cover paring knife dish for parings bowl

fork teaspoon tablespoon

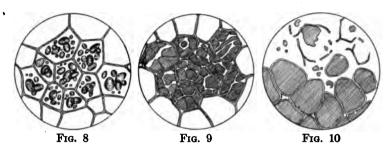
potato masher or ricer (Figure 7)

Work to be done:

- 1. Wash the potato in the bowl and pare, taking the parings off lengthwise. Be careful to pare thin.
 - 2. Remove the eves and wash the potato.
 - 3. If the potato is large, cut in two lengthwise.
- 4. Have enough boiling water in the granite pan to cover the potato.
- 5. Put the salt in the water and then put in the potato. Cover.
- 6. Boil until the potato can be easily pierced with a fork, then drain off the water at once so that the potato will not be soggy.
 - 7. Mash thoroughly or put the potato through the ricer.
- 8. Add the milk and butter and beat with the fork until light.

Principles:

Potatoes are made up very largely of starch, cellulose, and water. Cellulose, it will be remembered, is a woody fiber which is present in all plants. The cellulose is built up around the little grains of starch. Raw potatoes are of but little use to human beings because the starch is surrounded by the cellulose and the digestive organs are not able to break down this wall to get all the starch. When the starch comes in contact with



the boiling water, the little starch grains swell so that they burst their skins. Then the digestive juices easily act upon the starch. The chief advantage, then, in cooking potatoes is that cooked starch is more easily digested than raw starch.

Mashed potatoes, properly made, have a great deal of air beaten into them. This air makes them very light, gives them a whiter color, and makes them taste better.

Serving:

Put the potato into an oblong vegetable dish, leaving it fluffy and light, and serve. If desired, make a little hollow in the center and place in it a small piece of butter.

A little garnishing of parsley, that is, tiny pieces of parsley scattered over the top or arranged around the edge of the dish, adds to the attractiveness of the dish.

When mashed potatoes are served at dinner, it is usual to serve them from a large dish which may also be garnished with parsley.

Table manners:

Mashed potatoes are eaten with a fork.

Rule: Only forks and spoons are used to carry food to the mouth. Setting the table:

The table cloth, which should be ironed and folded with great care, with as few folds as practicable, should be carefully unfolded. It is much easier to keep from mussing it if two girls unfold and lay the cloth. Lay it lengthwise of the table with the long crease exactly in the center and the same length of cloth, about nine inches, hanging over each end. Carefully smooth out the creases by standing at either end and passing the hands, palms downward, lightly over the cloth from the center to the outsides, the full length of the table. Repeat the same operation standing at the middle of the sides.

What has been learned:

- 1. Starch grains of potatoes are surrounded by a wall of cellulose. (Figure 8.)
 - 2. Boiling water causes starch grains to swell. (Figure 9.)
- 3. When starch grains swell, they burst this covering of cellulose. (Figure 10.)
- 4. When the cellulose surrounding the starch grains is broken down, the digestive juices have a chance to act upon the starch.
 - 5. Raw starch is less digestible than cooked starch.
- 6. Air beaten into a mixture makes it light and more palatable.

Lesson IV

BAKED POTATOES

Materials used:

1 potato

Utensils needed:

Vegetable brush fork bowl oven (hot)

Work to be done:

- 1. Scrub the potato thoroughly in clean water with the brush.
- 2. Place on the upper grate of the oven, because it is hotter there.
 - 3. Turn the potato once in a while to insure even baking.
- 4. Bake until it feels soft. With medium-sized potatoes, this will be about 45 minutes.
- 5. Roll rapidly in the hand, then break the skin to allow the steam to escape so that the potato will not be soggy.

Principles:

Potatoes, as already learned, contain a great deal of water. For this reason, they, like apples, may be cooked by baking. The effect upon the cellular structure is just the same as when they are cooked in boiling water. One advantage of baking potatoes over boiling them is that none of the nourishing part is lost in the former process, while there is some lost in the latter through its being dissolved both in the water in which they are washed (after being pared) and in that in which they are cooked. Serving:

Place the potato in a vegetable dish and serve with a fork and small plate.

To prepare a baked potato for eating, break in two crosswise and remove the contents with a fork, placing them on the plate and the skin in the vegetable dish. Mash, sprinkle with a little pepper and salt, dot with butter, or cover with gravy if served at a meal, and eat with a fork.

Table manners:

Rule: The napkin should be placed on the lap with one fold, rather than spread out its full size.

Setting the table:

After the cloth is laid, the centerpiece, if there be one, should be placed in the center of the table and upon it should be placed the bouquet or other decoration. The flowers used for table decoration should be sufficiently low to permit those on opposite sides of the table to see each other.

If loose flowers are to be used on the table, they should not be scattered profusely, but laid carelessly here and there, or one or two small ones laid on each napkin. (See Figure 13.)

Cleaning up:

- 1. If any potatoes are unused, place on a dish and set in the icebox.
- 2. Wash the dishes as before directed.
- 3. Carefully wipe the stove and oven and set the latter in its place.

4. Remember to clean and dry all dishes and towels before putting away.

What has been learned:

- 1. Baked potatoes are more nourishing than boiled ones, therefore more economical.
- 2. The skin of the baked potato should be broken as soon as the potato is done.

Lesson V

POTATOES (Reading)

The potato was used as a food by the Indians of the central part of the western continent long before the discovery of America. It was introduced into Europe in the sixteenth century by the Spaniards, but not as a food, for it was at first planted in the flower garden as a curiosity. Sir Walter Raleigh brought its value as a food to the notice of Queen Elizabeth. Its cultivation first became general in Ireland where its large yield made it popular as a food during times of failure of other crops. For this reason it is usually known as the Irish potato. Today it stands first among the vegetables as a common food, and is raised in every country of Europe as well as America.

In the new state of New Mexico the wild potato still grows in the untilled canyons of the mountains. It is precisely like the potato grown in every American garden today except in size. This grandfather of the common tuber is no larger than a pea or, at most, a hazelnut. But it has the same kind and number of eyes as its big descendant, and its flavor, skin, and habit of growth differ in no particular. Even the blossoms are like those of the modern potato, save that they are no larger than a forget-me-not. If one had time and inclination to dig and gather enough wild potatoes to make a salad or to serve them boiled "in the jackets," these tiny tubers would be found as finely flavored as any sold in the markets. The contrast between the wild potato and its modern relative is made all

the more apparent by the immense size of the potatoes grown in the same region by means of irrigation.

A great many people think of the potato as being a root, but if the little depressions, known as "eyes," are examined, it will

be found that they are leaf scars, and, since leaf scars are found only on the stems of plants, the potato cannot be a root, but must be an underground stem. It is usually spoken of as a tuber. When a potato is planted, it is cut into pieces, each piece having a couple of eyes in it. These eyes sprout and give us a new plant.

About three-fourths of the potato is water, one-fifth is starch and the rest is tissue-building material and mineral salts. Since potatoes contain no fat and very



Fig. 11.—Potato Plant

little tissue-building material, they are served with fatty foods, such as butter, cream, and gravy, or with such tissue-building material, as eggs, cheese, milk or meat.

For cooking, smooth, medium-sized potatoes should be chosen, for smoothness indicates soundness and medium-sized potatoes prevent waste. Potatoes having green spots should be avoided, for these green spots are caused by their being grown too near the surface of the ground, and are a sign of bitterness.

When sprouts appear upon potatoes in the spring, they should be removed at once. The food which nourishes them is obtained from the potato; if they are allowed to grow, they will soon absorb the nourishment of the potato, which then becomes unfit for use.

Additional Recipes

BAKED SWEET POTATOES

Prepare and bake same as white potatoes.

BOILED SWEET POTATOES

Select potatoes of uniform size. Wash, pare, and cook until done in boiling salted water sufficient to cover. Sweet potatoes may be boiled with their skins on

Lesson VI

SAUTÉED ONIONS

Materials used:

1 large or 2 small onions

½ tp salt

1 tb butter

a few grains of pepper

Utensils needed:

Paring knife a small pan

a small pan bowl case knife and fork tablespoon teaspoon

omelet pan with cover Fig. 12.—Omelet Pan towel

Work to be done:

- 1. Pare the onion under water (to keep the eyes from smarting). Use the small pan. (To remove odor from hands, rub them with salt before washing.)
 - 2. Place in the bowl and wash in clean water.
 - 3. Cut the onion crosswise into thin slices.
 - 4. Place the butter in the omelet pan and heat.
- 5. Add onions, season with salt and pepper and cover. (Be careful not to have too hot a fire, for onions burn easily.)
- 6. Stir frequently with a fork to cook evenly and prevent burning.

Principles:

When food is cooked in a very little fat, it is said to be sautéed (sō ted'). Many vegetables as well as eggs and meat may be cooked in this way.

Because the article being cooked is not surrounded by heat as it is in boiling and baking, it must be turned at least once in order to expose all sides to the heat and thus cook thoroughly. As onions require long cooking, they must be turned often to prevent burning.

Keeping the pan covered hastens the cooking. The rising steam strikes the cover, and condenses into drops of water which trickle down the sides of the pan and help to cook the onions. The heat of the steam is not allowed to escape and therefore assists in cooking. Water in a covered vessel boils sooner than in an uncovered one.

Serving:

Serve on a vegetable dish, or with beefsteak at a regular meal. Onions are eaten with a fork.

Table manners:

The knife or fork, when not in use, should be placed across the plate at the right side.

Setting the table:

It is now customary, at a formal dinner, to place a service plate for each person. This plate, of the large dinner size, is put in the middle of the space allotted to each, about twenty inches, and about an inch from the edge of the table.



Fig. 13.—Set for Formal Dinner

These plates are put on the table before the dinner is served and not removed until just before the dessert is brought in.

The placing of the knives, forks, and spoons upon the table requires thought and attention. The number and position of each depend upon the meal and what is to be served. The convenience of the guest is the one unchanging rule that de-

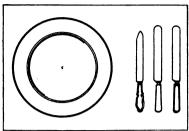


Fig. 14.—Service Plate with Knives at Right

termines the placing.

When a knife or knives are to be used, as many as will be needed before dessert should be placed at the right of the service plate, each one with the sharp edge turned toward the plate, in the order in which they are to be used, beginning at the extreme right.

that is, the one first used is the one farthest from the plate. Cleaning up:

- 1. Put hot water in the pan used for cooking the onion to get it ready for washing.
 - 2. Wash the dishes as before directed.

What has been learned:

- 1. To sauté is to cook in a little fat.
- 2. A covered vessel hastens cooking.
- 3. Greasy dishes should be soaked in hot water.

Additional Recipes

SAUTÉED ONIONS (Home Rule)

Take four or five times the amount given in the class rule (depending on the number to be served) and proceed as directed.

GLAZED ONIONS

Select small onions, wash, and remove the outside skins. Boil or steam until perfectly tender. Put butter into a pan, using the same amount for a given quantity of onions as in the sautéed onions. Let the butter brown. Put in the drained onions. Sprinkle with sugar, using \(\frac{1}{2} \) to each onion. Serve with meat.

GLAZED SWEET POTATOES

Wash and pare six medium-sized potatoes. Cook ten minutes in boiling salted water. Drain, cut in halves lengthwise, and put in a buttered pan. Make a syrup by boiling three minutes 1½ cups sugar and four tablespoons water. Add 1 tb butter. Brush potatoes with the syrup and bake forty minutes, basting twice with the remaining syrup.

Lesson VII

WHITE SAUCE (One)

Materials used:

1 cup, $c_1 = 16$ tablespoons = $\frac{1}{2}$ pint.

1 level tablespoon butter $= \frac{1}{2}$ ounce, oz. Butter is measured level, round, or heaping. A round tablespoon = 1 oz. A heaping tablespoon = 2 oz. $= \frac{1}{2}$ c. Unless otherwise stated, measures are always level.

½ cup diced, boiled, or baked potatoes or other cold cooked vegetable (prepared by the teacher)

1 tb butter

11 tb flour

a few grains of pepper

Utensils needed:

Granite pan measuring cup teaspoon

teaspoon



Fig. 15.— Measuring Cup

½ cup milk

1 tp salt

case knife tablespoon sieve

Work to be done:

1. Sift the flour through the sieve. (Flour packs in the bin

and should never be measured unsifted.) Figure 16.

- 2. Mix the flour with the seasonings.
- 3. Melt the butter in the granite pan, but do not brown.
- 4. Put the seasoned flour in the butter, mixing thoroughly.
- 5. Add the milk, stirring briskly all the time.
 - 6. Stir until the sauce boils.
- 7. Add the prepared potatoes to the sauce and serve hot.



Fig. 16.—Sifting Flour

Principles:

Flour contains a great deal of starch. You have already learned that moist heat causes the starch grains to swell; it is



Fig. 17. — Holding Fork in Improper Position

this swelling that thickensthe milk in the white sauce. Mixing the flour with the melted butter each little separates particle of flour from its neighbor, so that each will be completely surrounded by the liquid as soon as the milk is

added. If the butter and flour are not thoroughly mixed before adding the milk or the sauce is not stirred during the cooking, it will be lumpy. Serving:

When served at a meal, luncheon or dinner, potatoes with white sauce (also known as creamed potatoes) are usually placed on the table in one dish, unless the dinner is served from the pantry, and served on the plate with the meat. They should be eaten with a fork.

Table manners:

The knife and fork when used for cutting should be held as here shown, the handles in the hollows of the hands, not as shown in Fig. 17. Setting the table:

When knives are needed, as for a formal dinner or when uncut meat is served, the forks should be placed at the left of the service plate, as many as are



Fig. 18.—Holding Fork Properly

needed before the dessert, in the order they are to be used, beginning at the extreme left. All the tines should be turned up. This order will be as follows (if the hostess is so fortunate as to possess the different kinds): 1 (at left) oyster; 2, fish; 3, meat; 4, salad.

If there are not too many courses so that there is a great display of silver, the dessert fork may be placed on the table with the others at the beginning, next to the service plate.

Cleaning up:



Fig. 19.—Forks at Left of Service Plate

Soak the granite pan and stirring spoon in cold water. Proceed as directed in previous lessons.

What has been learned:

Flour contains much starch.

Thorough mixing and constant stirring prevent lumpy sauce. The starch thickens a liquid when heat is applied.

Lesson VIII

WHITE SAUCE (Two)

Materials used:

Same as in Lesson VII

Utensils needed:

Same as in Lesson VII

cup and plate

Work to be done:

- 1. Sift a sieve full of flour into a plate.
- 2. Measure the flour as directed in Lesson VII, and place in cup.
- 3. Add $\frac{1}{2}$ th milk to the flour and mix to a paste. (If too much milk is added at first, the mixture will be lumpy.)
 - 4. Add another \(\frac{1}{2}\) tb milk and mix well.
 - 5. Add 1 tb milk and mix.
- 6. Add enough milk to make the mixture like thin cream. Mix well.

- 7. Pour the rest of the milk into the saucepan and heat.
- 8. Add the flour and milk mixture, stirring constantly until it boils.
- 9. Just before taking from the fire, add the butter, salt, and pepper.

Principles:

The little grains of flour must be separated from each other if the sauce is to be smooth and free from lumps. This is accomplished by adding a very little milk to the flour until a thick paste is formed. The friction between the mixing spoon and the flour mixture is sufficient to crush any lumps that may be formed. As more liquid is added, the grains are separated still more, until when the mixture reaches the thickness of thin cream it may be easily poured into the heated milk.

This method of making white sauce is much used in making soups and gravies. White sauces make it possible for the housewife to warm over and serve in a palatable form cold cooked vegetables and some meats, such as chicken and veal, which



Fig. 20. - Eating Salad, Fork in Right Hand

would otherwise be wasted.

Table manners:

RULE: When used to carry to the mouth meat or other food which must first be cut, the fork should be held in the left hand. When used for other food, it should be held in the right hand. Fig. 20. Setting the table:

The teaspoons

are the next silver to place on the table.

No set rule can be given for their placing, as usage differs in different places and at different times. When both knives and forks are used and tea or coffee is served with the main course, the teaspoons, as many as are needed, may be placed in front of the service plate, handles to the right and arranged symmetrically with the one to be used last next to the plate; or they may be placed at the right of the knives; in either case the soup spoon should always be at the right of the knives. If only forks are used, these may be placed at the right of the plate and the spoons to the right of them, the one to be used first being at the extreme right. If the coffee is not served until the dessert is brought in, some hostesses do not place any teaspoons on the table at the beginning, as there will be, in most cases, no use for them. If there be need for any, they are placed at the right of the knives, the one to be used first being farthest to the right.

What has been learned:

Grains of flour may be separated as well by mixing with a liquid as by mixing with butter.

White sauces enable the housewife to save left-over cooked vegetables, and are thus economical.

Recipes

BRUSSELS SPROUTS IN WHITE SAUCE

Pick over, remove wilted leaves, and soak brussels sprouts for a while in ice-cold water to restore crispness. Cook in boiling, salted water, covered, till they are tender. Drain, and to each pint add one cup of thin white sauce.

CABBAGE IN WHITE SAUCE

Cut cabbage into small pieces, boil it in salted water till tender, drain and heat in white sauce number 1. Or, place the boiled cabbage in a dish, cover with white sauce, lift the cabbage with a fork so as to mix it thoroughly with the sauce, sprinkle with buttered bread crumbs, and bake till crumbs are brown.

CREAMED CAULIFLOWER

Remove the outer leaves from the stalk. Place the cauliflower, head down, in cold, slightly salted water for thirty minutes. (This will draw any insects that may be lurking in the head.) Break or cut into suit-

able pieces and cook cauliflower in boiling salted water, covered, till tender; drain, separate the little bunches and reheat in white sauce.

CREAMED CELERY

Wash and scrape celery and cut into inch pieces. Cook in boiling salted water, covered, till soft; drain, and to 2 cups of celery add 1 cup of thin white sauce. The outer stalks of celery are best used in this way.

CREAMED ONIONS

Place onions in cold water and remove the skins while the onions are under water. (This prevents their hurting the eyes.) Drain, cover with boiling water, and let boil five minutes; drain, to remove some of the strong flavor, and again cover with boiling salted water; cook till tender and drain. The onions may be served plain with butter, salt, and pepper for seasoning, or they may be covered with white sauce. Or, cut the boiled onions in pieces, place in a baking dish, cover with white sauce, sprinkle with cracker crumbs, and bake till the crumbs are brown.

To remove the odor from the hands after preparing raw onions, rub the hands with salt before washing them.

CREAMED SALSIFY

Wash and scrape the salsify and place it at once in water to which a few drops of vinegar have been added. This prevents its discoloration. Cut salsify in slices, cook in boiling salted water, covered; drain and add white sauce.

CREAMED PEAS

Cook peas in boiling water until tender, uncovered, adding salt just before the peas are done; drain; season with butter, salt, and pepper. Or, drain and to two cups of peas add three-fourths cup white sauce number 2. Canned peas may be drained, rinsed, and reheated in the sauce.

CREAMED TURNIPS

These may be washed, pared, cut into slices or cubes, cooked in boiling salted water, drained, and served with white sauce.

CREAMED CARROTS

These should be scraped, cut into strips, slices or cubes, and cooked in boiling salted water till tender, drained, and served with white sauce.

CREAMED POTATO

Reheat two cups of cold boiled potato, cut into dice, in one cup of white sauce.



1 to salt

Lesson IX

STUFFED TOMATO

Materials used:

Medium-sized, ripe, firm tomato small slice of stale bread dash of pepper

Utensils needed:

Bowl kneading board paring knife granite pie tin case knife omelet pan small plate teaspoon rolling-pin fork



½ tp butter

Fig. 21. - Stuffed Tomato

Work to be done:

1. Wash the tomato in clean cold water, wipe, and cut off a slice from the stem end. Dig out the seeds with a spoon, leaving the core and the partitions.

(Be careful not to let the tomato stand on a tin dish, for the acid of the tomato when it comes in contact with the



Fig. 22.—Rolling Bread Crumbs

- tin forms a poison.)
- 2. Put the slice of bread on the kneading-board and pound and roll it until it is thoroughly crumbled.
- 3. Melt the butter in the omelet pan, but do not brown or burn it.
- 4. While the butter is still in the pan, add the bread crumbs.
- 5. Add the pepper and salt and mix the four things thoroughly.
- 6. Fill the spaces in the tomato with these seasoned crumbs, using a teaspoon.

7. Put the slice back on the top, place the tomato in the granite pie tin, and bake in a moderate oven 15 or 20 minutes. Principles:

Like all other vegetables, tomatoes contain cellulose. They also contain a great deal of water—so much, in fact, that they can be cooked in their own juice, which will moisten the bread crumbs.

Tomatoes are a heat and energy-giving food, while, on the other hand, bread is a tissue-building food, hence, the two together have a greater food value than either alone would have.



Fig. 23.—A Table Set Without Service Plates

Serving:

Heat the small plate, slip the tomato when done onto it, garnish with parsley, and serve hot. This is appropriate for dinner or luncheon. Eat with a fork.

Table manners:

Do not open the mouth to receive food until the food reaches the mouth.

Setting the table:

Napkins are folded in quarters and placed on the table parallel with the edge of the table and on a line with the service plate, the free edges being to the right and to the edge of the table. (See Figure 13.)

The napkin should be placed at the left of the forks, if they are at the left, and at the left of the plate if the forks are at the right.

If no service plate is used, the napkin should be where the plate is ordinarily placed. (See Figure 23.)

Cleaning up:

- 1. Be sure to use plenty of hot soapy water for washing the greasy dishes, such as the omelet pan in which the butter was melted.
- 2. Scour all discolored dishes and utensils, and put everything away carefully.
 - 3. Leave the dish towels and washer sweet and clean.

What has been learned:

- 1. Adding bread to the tomato gives it greater food value.
- 2. Tomatoes contain an acid which forms a poison when in contact with tin.

Lesson X

SCALLOPED TOMATO

Materials used:

Medium-sized firm tomato1 c stale bread crumbs $\frac{1}{2}$ c boiling water $\frac{1}{2}$ tb butter $\frac{1}{2}$ c cold watersalt and pepper

Utensils needed:

Baking dish (granite or rolling-pin case knife earthenware cup) spoon tablespoon bowl pan omelet pan

Work to be done:

- Place the tomato in the pan and pour boiling water over it. Let it stand one minute.
 - 2. Drain off the hot water and cover with cold water.
- 3. Remove the skin, which will now come off easily. (See Figure 24.)
 - 4. Roll the bread crumbs on the kneading-board.

5. Measure out ½ to butter by packing the butter into the spoon, leveling off the top with the edge of a knife, then dividing it lengthwise into halves and dividing one-half into halves.



Fig. 24.—Removing Skin from Tomato

- 6. Melt the butter in the omelet pan, being careful not to let it burn.
 - 7. Add the bread crumbs.
- 8. Cover the bottom of the baking dish with a layer of the bread crumbs.
- 9. Cut the tomato into slices a quarter-inch in thickness.
- 10. Place a slice of tomato on the bread crumbs in the dish.
- 11. Season with a little salt and pepper and dot with butter.
- 12. Place a layer of bread crumbs over the tomato, then another slice of tomato, and continue alternating the two, not forgetting to season each slice, until the dish is filled, with a layer of bread crumbs on top.
- 13. Bake in a moderate oven until the crumbs are browned. Principles:

A scalloped vegetable, containing, as it does, bread, butter, and the vegetable, that is, tissue-building, heat-giving, and energy-producing food, possesses food value, hence is a good

dish to form the main part of a luncheon.

Serving:

Scalloped tomatoes should be served hot in the dish in which they were baked.

For a luncheon or dinner, they may be



Fig. 25.—Scalloped Tomatoes in Individual Ramekins and in Baking Dish

baked in a baking dish or in individual ramekins. (See Figure 25.) They should be eaten with a fork.

Table manners:

Always eat or sip from the side of a spoon.

Setting the table:

If the dinner is a formal one, just before it is served a dinnerroll, bread-stick, or a piece of bread 2½ by 1½ inches is placed on the napkin, which is folded over once to cover it partially.

When the number of forks makes the table look crowded, many hostesses lay the napkin on the service plate.

Glasses for water should be set at the right and a little above the service plate or at the tip of the knife nearest the plate.

Cleaning up:

If the tomato sticks or is burned to the baking dish, remove it with sapolio.

What has been learned:

- . 1. The skin of the tomato can be easily removed by the use of first, boiling water, and second, cold water.
- 2. The food value of a dish can be increased by combining foods furnishing different food principles.

Lesson XI

Squash

Materials used:

Squash, medium-sized ½ c sugar for each piece tp butter for each piece salt and pepper

spoon

fork

oven

dessert plate

Utensils needed:

Vegetable brush sharp knife steamer kettle case knife



Fig. 26.—Steamer

Work to be done:

1. Wash the squash well, using the vegetable brush.

- 2. With a sharp knife, cut into halves lengthwise.
- 3. Place a large piece of wrapping paper on the desk or table.
- 4. Scoop out all the seeds and stringy substance with a spoon, place in the paper and empty into the garbage pail.
 - 5. Cut the squash into pieces about $2\frac{1}{2}$ by 4 inches.
- 6. Put half the pieces into a moderately heated oven and bake until they can be pierced easily with a silver fork.
 - 7. Place the remainder in a steamer.
- 8. Bring a quart of water to a boil in a kettle which the steamer fits over.
- 9. Place the steamer over the kettle and keep the water boiling until the pieces can be easily pierced with a fork.

Principles:

The baking of squash forms a hard, tough skin over all the cut surface, thus decreasing the amount of food material. The process of steaming offers no danger from burning; and because no hard skin is formed, there is less waste.

Serving:

Scoop out the soft portion of each piece of steamed squash, mash with a fork, season with $\frac{1}{2}$ tp sugar, a pinch of salt, and a dash of pepper. Add $\frac{1}{2}$ tp butter. Serve on a small plate or vegetable dish.

Treat the baked squash in the same way.

Compare the two dishes in amount; in taste.

Baked or steamed squash is a typical dinner dish. It is usually served from one large dish after having been removed from the rind and seasoned.

Squash should be eaten with a fork.

Table manners:

Rule: The napkin should never be tucked in the collar.

Setting the table:

In setting the table for an informal or family dinner, the service plate may be omitted, all the knives and forks to be used may be put on the table, also salts and peppers near the corners of the table or one of each for every two persons. (See figure 23.)

Small plates and bread and butter knives for the butter ball and bread or diffner roll, which should be put on before dinner is announced, are placed at the left just above the forks. Glasses should be filled with water just before announcing dinner.

The soup may be served by the hostess from a large tureen instead of being brought in individual plates from the kitchen, in which case the tureen, covered, should be placed in front of the hostess and the soup plates at her left.

What has been learned:

- 1. Steaming is a better method of cooking than baking because:
 - (a) It saves nutrient material.
 - (b) It prevents the burning of food during cooking.

Lesson XII

VEGETABLES (Reading)

Place of vegetables in the diet:

Vegetables are very valuable in the diet because they furnish mineral salts, a great deal of energy-giving material, and a very pleasing flavor. Some vegetables, as peas, beans, and lentils, also furnish tissue-building material.

Selection of vegetables:

In choosing vegetables, be sure that they are fresh; for if wilted or very old, they are not economical and may even be unwholesome. Hot-bed or "forced," vegetables are never quite equal to those grown in season and besides are very expensive. It is always best to use medium-sized vegetables. The very large ones are usually so old and woody that they require more cooking and are not so nutritious; they may even become hollow in the center.

Care of vegetables:

Winter vegetables should be stored in a cool, dry place where they will not freeze or be in the light. Squash and pumpkins are better if kept in a warm, dry place. They should be so placed that no two vegetables touch each other, or they will spoil quickly. They should be watched, and if spots begin to come on them, should be cooked at once.

Rules for cooking vegetables:

All green, above-ground vegetables, such as asparagus, should be cooked in boiling salted water, uncovered to retain their color. Peas and beans are an exception. They should not be salted till nearly tender, as salting hardens them.

Underground vegetables should be cooked in boiling, salted water, covered. The water should be boiling when the vegetables are put in. Cabbage and onions give off a less offensive odor, or at least the odor is less noticeable, if they are cooked uncovered.

Vegetables should be cooked only till tender, the best methods to use being those that cause the least loss. Baking and steaming are probably the best. Some vegetables, such as dried beans, have a very strong flavor and need to be parboiled, that is, partly cooked, so that they may lose part of it before baking.

Vegetables should always be cooked whole or in as large pieces as possible, as there is then less loss. If the water in which they are cooked is to be used or served with the vegetables, the pieces may be smaller than otherwise. As little water as possible should be used for cooking vegetables that can be stirred; others should have just enough water to cover them. Often the nutritive matter which dissolves from the vegetables may be saved by using the cooking water in soups or sauces. No definite time can be given for the cooking of vegetables, as that depends largely upon their age and size.

Squash:

Squash may be divided into two classes, the summer and the winter squash. Summer squash is known as crook-neck, and of this there are two varieties, the white and the yellow.

The Hubbard squash is the best representative of the winter class of squash.

A good squash will have a rind which cuts hard; when cooked, a squash should be dry and mealy.

Sweet potato:

In the southern states, where it is an important article of food, the sweet potato is extensively grown. It contains more dry matter than the Irish potato, the difference being due to the presence of more sugary substance; this is why the potato tastes so sweet. The sweet potato also contains more tissue-building material.

Tomato:

Like the potato, the tomato was unknown until the discovery of America. At first it was called the "love apple," and was cultivated only for the beauty of its green foliage and of its fruit, which was thought to be poisonous.

Onion:

The onion has been in use since early times. It is said that the carvings on the pyramids of Egypt show that the onion and garlic were used by the workingmen of early times. The Spaniards and Italians of today are noted as garlic and onion-eating people. Garlic belongs to the onion family, but in appearance it is slightly different, being made up of small bulbs. Both of these vegetables are said to be good for the nerves.

Uncooked vegetables:

Many of the summer vegetables may be eaten uncooked. The common ones so used are celery, lettuce, tomatoes, cucumbers, radishes, parsley, onions, and cabbage. They must be used when young and tender. They should be gathered at night or early in the morning before the sun has withered them and while the dew is still on them. They should be washed and put in a cool place; they may be wrapped in a cloth and placed near, but not directly on the ice. To freshen withered vegetables, let them soak in water, but no longer than is necessary. These vegetables may be used for garnishes, relishes or salads.

Directions for serving certain uncooked vegetables:

- 1. Slice tomatoes thinly.
- 2. Serve stalks of celery in a glass dish.
- 3. Pare cucumbers and cut them in thin slices.



Fig. 27.—Sliced Tomatoes

- 4. Radishes are very pretty when served in the form of "radish roses." To make them, slit to within a short distance of the top. Placetheradish in cold water and let it stand. The skins will turn back, making each slit look like a rose petal.
- 5. Lettuce may be served with vinegar, sugar, pepper, and salt, with hot bacon drippings. It may be served with cream, as a salad.
- 6. Cabbage may be shredded finely and served with cream, or with vinegar, pepper, and salt.
- 7. Onions sliced and served either plain or with vinegar, salt, and pepper make a delicious relish. Very young onions are often served with salt alone.



Fig. 28.—Making Radish Roses

SOUPS

Lesson XIII

CREAM OF POTATO SOUP

Materials used:

Home Rule		
utter		
lour		
salt		
per		
`		

Utensils needed:

For preparing the potato:
Granite pan with cover paring knife bowl case knife teaspoon

tin for parings



Fig. 30.—Improvised Double Boiler
For making the soup:



Fig. 29.—Double Boiler

Fine-meshed sieve double boiler measuring cup case knife tablespoon teaspoon

mixing cup

omelet pan

soup plate

Work to be done:

- 1. Prepare potato for boiling as directed in Lesson III, but slice in $\frac{1}{4}$ -inch slices before placing in the boiling water.
- 2. Fill bottom part of double boiler two-thirds full of water and place on the stove.
- 3. Place the milk and onion in the upper part of boiler, and set in the lower part.
- 4. When the potato is done, drain carefully, shake gently, and let stand uncovered a minute or two over the fire.
 - 5. Force the potato through the sieve into the bowl.
- 6. When bubbles appear on the surface of the milk along the sides of the pan, remove the onion and put in the potatoes.

Make a binding as follows:

- 1. Melt the butter carefully in the omelet pan.
- 2. Add flour slowly and mix thoroughly.
- 3. Add a tablespoon or two of the hot milk and mix.
- 4. Add spices and salt and stir.
- 5. Pour into the soup slowly, stirring all the time.
- 6. Sprinkle the parsley on the soup after it has been poured into the hot soup plate for serving.

Principles:

As potatoes are heavier than milk, they will sink to the bottom unless something is added which will hold the two together. This is the purpose of the binding.

The same principle was applied in making the cream sauces (Lessons VII and VIII); in fact, a cream soup is really a very thin white sauce.

White pepper is less conspicuous than black pepper.

Serving:

Cream soups should be served in a soup plate. They are eaten with a soup spoon or other spoon larger than a teaspoon.

The soup plate is set on the service plate, and when this course is finished, only the soup plate and spoon are removed.

Table manners:

Rule: In taking up soup with the spoon, use a backward motion, that is, a motion away from you.

Setting the table:

Bonbons and relishes. such as radishes, olives, celery, or salted nuts, may be placed on the table at pleasure, although it is becoming usual to set these on a sideboard or table and pass to each guest.

At a formal dinner it is not customary to have butter or other seasoning on the table. The condiments. sauces, and seasonings are served with each course as they are needed.



Fig. 31.—Taking up Soup with Backward Motion of Spoon

Cleaning up:

1. Soak omelet pan in

hot water and upper part of double boiler in cold water.

2. Wash the dishes as before directed.

What has been learned:

- 1. A binding is a mixture of flour and butter added to a soup to thicken it.
 - 2. A cream soup is a thin white sauce.

General suggestions for cream soups:

Soups may be thickened with flour, cornstarch or rice flour, one tablespoonful for a quart of soup. Flour is the cheapest, but cornstarch gives a smoother soup.

In vegetable soups or purées as soon as the hot butter and flour are blended the mixture may be stirred into the soup. The hot butter cooks the flour more thoroughly than it can be cooked any other way.

Lesson XIV

SPLIT PEA, LENTIL, OR BEAN PURÉE, WITH CROUTONS

Materials used:

Class Rule

½ c dried legumes (peas, beans, or lentils)

1 slice onion

1 stalk celery

₹ tb flour

 $\frac{1}{4}$ c strained tomato or

 $\frac{1}{4}$ c cream

½ tb butter

salt and pepper

1 small slice bread

1 tp butter drippings

Utensils needed:

Double boiler saucepan measuring cup purée or extension sieve

Work to be done:

Purée:

- 1. Soak the legumes over night in soft water.
- Drain and simmer (that is, cook slowly, but do not boil) in
 pt of soft water, stirring often with a wooden spoon.
 When the legume is becoming tender, cut the onion and the
- celery fine, and sauté in a little dripping. (See Lesson VI.)
- 4. Add this to the legume. When tender, press through the purée sieve.
 - 5. Heat again.
 - 6. Melt the butter and add the flour, mixing thoroughly.
 - 7. Add the tomato or cream, stirring constantly.

Home Rule

1 pt dried legumes

1 onion

 $\frac{1}{2}$ head of celery

3 tb flour

salt and pepper

3 tb butter

 $\frac{1}{2}$ can strained tomato or 1 c cream



Fig. 32.—Extension Sieve

case knife plate

wooden spoon omelet pan baking tin soup plate soup spoon



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- 8. Pour this into the soup, being careful not to allow it to become lumpy.
 - 9. Add seasoning.

Croutons:

- 1. Spread the bread with butter and cut into $\frac{1}{3}$ -inch cubes.
- 2. Place in the baking tin and bake in a slow oven till nicely browned.

Principles:

On account of the evaporation of water, legumes become very hard when they are dried. They therefore require long, slow cooking in order that they may become soft and digestible. Salt should not be added until the purée is ready, as its addition during the process tends to harden the tissue of the legume.

Hard water contains lime salts, which have a tendency to harden the tissue-building material of the legume. If hard water be used, a little soda added will help to soften it.

Serving:

Place the croutons on the soup plate, dip the purée, and pour it over them.

Some hostesses pass croutons to the guests, who help themselves. When so served, the croutons should be placed in a rather deep dish with a large spoon for dipping.

Purées are luncheon dishes.

Table manners:

Rule: Soups should be eaten with no noise of the lips.

Setting the table and serving guests:

There are two ways of serving a formal dinner, both equally "good form." The one chosen will depend upon the convenience and taste of the hostess.

The more formal way:

Arrange each course in the pantry on individual plates.

Take the tray in the *left* hand, put the plate containing the individual portion upon it.

Take it to the right side of each guest.



With the *right* hand place it upon the service plate until after that plate is removed, which may be after the soup course or not until the meat course is finished, then set it in front of each guest and close to the edge of the table.

If any separate dish is to be served with a course, it should be placed on a tray and passed to the *left* side of each guest, being held low enough to enable the guest to help himself with his right hand.

The more fashionable way is to leave the service plate on the table until dessert. In this case, the tray is not used in placing the course.

What has been learned:

Legumes require long, slow cooking.

Cooking in hard water hardens legumes.

Soda added to hard water will help to soften legumes.

Lesson XV

CREAM OF TOMATO SOUP

Materials used:

Class Rule		Home Rule	
$\frac{1}{4}$ c strained	½ tp salt	2 c strained	½ tp soda
tomato	$\frac{1}{16}$ tp pepper	tomato	1 slice onion
½ c milk	½ tp sugar	2 c milķ	1 tp salt
$\frac{1}{4}$ tb flour	2 soda	2 tb flour	$\frac{1}{8}$ tp pepper
½ tb butter	crackers	2 tb butter	1 tp sugar
$\frac{1}{16}$ tp soda	small piece of		
1 slice onion	cheese A	3	

Utensils needed:

Double boiler
saucepan
white cup
measuring cup
purée sieve



teaspoon grater Fig. 33.—Grater baking pan

case knife tablespoon

Work to be done:

- 1. Put the milk into the double boiler and set it on to heat.
- 2. Put the onion into the milk.
- 3. While the milk is heating, slice or cut up the tomato and cook it in the saucepan with the sugar till it is soft. Add only enough water to keep it from burning.
- 4. Put a little cold water with the flour and stir; then add a little more and stir till a thin, smooth paste is formed.
- 5. When the tomato is soft, add the soda, then put it through the sieve.
- 6. When the milk is hot enough, that is, when bubbles appear on the surface, add the flour paste to it slowly, stirring all the time so that the mixture does not become lumpy.
 - 7. Add the strained tomato, salt, pepper, and butter.
 - 8. Strain the soup and it is ready to serve.
- 9. While the soup is being made, lay the crackers in the baking pan, grate the cheese and sprinkle over them, set in the oven and heat till the cheese melts.

Principles:

In the lesson on stuffed tomatoes, it was stated that tomatoes contain an acid. When this acid comes in contact with milk, the latter curdles, or becomes lumpy like sour milk. If soda is added to the tomato, it takes away the effect of (neutralizes) the acid, and the milk does not curdle.

Serving:

This soup makes a good luncheon dish. It should be served like the cream of potato soup. The crackers should be served on a small plate or laid at the left on the plate on which the soup plate is served.

Table manners:

RULE: When one is a guest at a single meal at a house, the napkin should not be folded again, but laid loosely at the left side of the dessert dish.

To crumple a napkin or muss it, save as in ordinary usage, is in bad taste.

Setting the table and serving guests:

The second method of serving a formal dinner follows:

The more simple way (Russian style):

Have the course cut in suitable pieces on a large dish or platter, with the necessary serving spoon, knife, or fork.

Put the platter on a tray or, if too large, carry in the hands with a folded napkin between the dish and the hand.

Serve at the left of each guest.

Wait until all have finished before removing a course.

Take the tray in the left hand, pass to the right of each guest and remove each plate with the right hand, placing it on the tray.

Remove one plate at a time, or all belonging to the course at each cover.

It is allowable to dispense with the tray, if pressed for time, and to take a plate in each hand, thus removing two plates at a time.

Cleaning up:

Soak the cup in which the flour paste was made in cold water; this makes the washing of the dishes much more simple. As soon as the tomato has been put through the sieve, empty the seeds and all else that does not pass through the sieve into the garbage pail. Wash the dishes in the usual way.

What has been learned:

- 1. Tomatoes cause milk to curdle.
- 2. Soda counteracts the acid of the tomatoes.
- 3. A cream soup is the pulp of a vegetable strained through a sieve and thinned with milk, cream, or some liquid, with a binding of flour or cornstarch added to hold the ingredients together.
 - 4. A purée is a thick cream soup.
- 5. When vegetables are so old and tough that they cannot be served whole, they may be used in soups or purées as the method of straining removes the tough and indigestible material.



Additional Recipes for Soups

CREAM OF PEA SOUP

Home Rule

1 can or 1 pt of peas	1 pt milk	2 tb butter
1 tp sugar	1 slice onion	1 tp salt
1 pt cold water	2 tb flour	16 tp pepper

Boil the peas in water till tender if fresh peas are used; force them through a strainer and add pulp to the milk thickened with the flour which has been stirred into the melted butter.

CREAM OF CELERY SOUP

Class Rule	Home Rule
¿ c celery	3 c celery
½ c boiling water	1 pt boiling water
½ tp butter	1 pt milk
½ tp flour	1 slice onion
½ c milk or ½ c milk and ½ c cream	2 tb flour
salt and pepper	🛂 tp salt
	2 th hutton

Wash and scrape the celery before cutting it into slices. Cook in boiling water till tender, then strain through a sieve, being careful to strain out all the pulp. Scald the milk, to which the onion has been added. When the milk is scalded, remove the onion and add the milk to the celery water. Bind with the butter and flour rubbed together.

Purée of Lima Beans

One pint of Lima beans; if dry, soak over night in cold water; boil in water or the thin part of a can of tomatees (using the thick part for scalloped tomatoes), until they are soft. If the water reduces very much, add a little milk or water. Sift very closely and add salt, pepper, and eayenne to taste; if you like, add a little onion juice, mace, or any other seasoning. To keep the thick part from separating, add one scant table-spoon of flour cooked in one tablespoon of butter. Let the butter stand in a warm place until it is melted, then rub the butter and flour together funtil perfectly smooth, pour in one cup of boiling soup, and stir hard; then stir into the remainder of the soup. Slice three small tomatoes very thin, put them into the soup, and it will be ready to serve as soon as it boils. Use just enough water when first boiling the beans to keep them from sticking to the bottom of the kettle.

STARCH

Lesson XVI

EXPERIMENTS

Materials used:

1 tb sugar

2 tb cornstarch

water

Utensils needed:

Microscope (if possible)

teaspoon

cup

slides with various starch grains 2 tumblers

tablespoon

Work to be done:

Experiment 1:

- 1. Fill each tumbler two-thirds full of water.
- 2. In one, place 1 tb sugar.
- 3. Mix 1 tb cornstarch with enough cold water to make a paste, dilute it a little, and put it into the second tumbler of water.
 - 4. Stir the contents of each tumbler.
 - 5. Let it stand a few minutes.

What has become of the sugar? of the starch?

. What then is one difference between sugar and starch? Experiment 2:

- 1. Place 1 tb dry starch in the cup.
- 2. Pour over it 2 tb boiling water. Do not stir it. What has happened?
- 3. Break open one of the lumps. How does it appear on the inside? What is the effect of hot water upon starch? Look at the various slides through the microscope.

Principles:

In appearance starch is a fine white powder. The grains of this powder differ in different plants. For example, potato starch grains are oyster-shaped and have peculiar markings, somewhat like the markings on an oyster or clam shell. They are also much larger than the starch grains of rice or of tapioca.

The great difference between starch and sugar is that the latter is soluble in cold water and the former is not.

When hot water is poured upon dry starch, the grains first touched by it swell, forming a jelly-like mass around the other grains not immediately touched by the hot water. The reason, then, why flour must be mixed either with cold water or other liquid, or with butter or other fat, in making white sauces and soups, is that each little grain must lie separate or apart from the others so that each may be reached by the hot liquid at once, thus causing them all to swell at the same moment so that there will be no lumps formed.

Cleaning up:

Soak all the sticky dishes in cold water.

What has been learned:

- 1. Starch grains are a fine white powder.
- 2. They vary in size, shape, and markings in different plants.
- 3. Sugar is soluble in cold water; starch is not.
- 4. Hot liquids swell the starch grains they first touch, thus forming balls, or lumps.
- 5. Soups and purées are so nutritious that with bread and butter they may form a complete luncheon.

Lesson XVII

CORNSTARCH MOLD

Materials used:

4 c milk 1 tb cornstarch 3 tb cream 1 tb sugar $\frac{1}{6}$ tp salt 1 tp sugar

 $\frac{1}{4}$ tp vanilla or other flavoring

Utensils needed:

Double boiler wooden spoon tablespoon measuring cup cup for mixing teaspoon cup or other mold

Work to be done:

- 1. Place the milk in a double boiler and heat it.
- 2. Mix sugar, starch, and salt.
- 3. Add this mixture very gradually to the hot milk, stirring constantly.
 - 4. Cook until thick.
 - 5. Dip the mold in cold water.
- 6. Pour the cooked mixture into the mold and set aside to cool.

Principles:

Another method of separating the starch grains before adding them to the hot liquid is to mix them with grains of salt and sugar. The little grains of salt and sugar separate the grains of starch sufficiently, especially if they are added slowly to the hot liquid. Then if the liquid is stirred while the sugar and starch mixture is added and until the mixture boils, there will be no danger of lumping.

Serving:

When the mold is cold, it should be turned into an individual glass dish and put on a small plate on which a fancy paper doily has been placed.

Add 1 tp of sugar and the vanilla to the cream and turn over the mold.

This makes a light, tasty dessert for either luncheon or dinner.

Table manners:

Rule: Never put the elbows on the table.

Setting the table and serving guests:

The English mode of serving is to set the whole of each course, often containing many dishes, at once upon the table, the hostess serving the soup, salad, and dessert, and the host carving and serving the fish and roast. This is the style usually seen every day at English, French, and American tables, where but one or two, or perhaps no maids are employed.

By a compromise plan, or style, such dishes as the salad or dessert, which present an attractive appearance and can be served quickly and without much effort, are served by the hostess, and a fish, for instance, which is easily separated into individual portions, is served by the host on the plates set before him. The other dishes are served from the pantry.

Cleaning up:

- 1. Soak the double boiler in cold water.
- 2. Gather all dishes together and pile each kind by itself.
- 3. Wash glassware first, being careful to put glass into warm water edgewise that it may be evenly heated so that it will not break.
 - 4. Wash silver, china, porcelain, and kitchen utensils.
 - 5. Wash and wipe stove and desk or table.
 - 6. Wash and rinse towel and cloth.

What has been learned:

- 1. Sugar and salt mixed with starch will separate starch grains just as well as will melted butter or cold liquid.
- 2. Starch swells, thereby stiffening the mixture so that when cold it will be quite firm.

CEREALS

Lesson XVIII

THE FIRELESS COOKER (Reading)

Some twenty years ago a Mr. Atkinson invented the Aladdin oven, a double-walled box with the space between the walls filled with a non-conducting substance (that is, a substance which will hold, not throw off heat). By means of this oven a dinner can be cooked with the heat of an ordinary kerosene lamp.

Soon after the invention of this oven, some poor people in Europe discovered that they could partially cook their food without a fire. They first cooked the food in the ordinary way about one-third the time required, and then put the kettle containing it into a closed box packed with hay. When opened some hours later, the food was found to be perfectly cooked.

Although the fireless cooker is looked upon generally as a new discovery, it is in reality a modern type of this hay box and of the old-time brick oven — Dutch oven — an oven variously termed, but always used in one way. The old time oven was a companion to the "tallow dip," and the receptacle for the carrying of borrowed fire. It was old before George Washington's shoe buckles were new and before Boston held her first tea party.

Instead of heating the foods to the active cooking point, our grandmothers heated the oven to the cooking point and placed the foods within it. In both cases the principle is the same — the retention of heat.

Throughout old Mexico and among the Mexicans and Indians of the southwestern states, the fireless oven is still used extensively. Outside each adobe dwelling, is always an adobe struc-

ture about four feet high and shaped like an old-fashioned beehive. It has an opening at one side and a smaller one near the top. The first is for the building of the pre-baking fire, its removal and to receive the food. The upper opening, which is for the escape of the smoke, is plugged up after the fire is removed.

The first step in the development of the fireless cooker was to give permanent form to the "box," and use other means than

hay of retaining the heat. These first fireless cookers could neither bake nor roast, but were a great saver of time, energy, and fuel in boiling and stewing.

The latest step in the direction of fireless cooking has given us the cooker in which any kind of food may be placed raw and come out cooked to perfection without having received as



Fig. 34.—Fireless Cooker

perfection without having received any attention other than is required to prepare it in the raw state as for ordinary cooking, and heating the radiators, which are the source of heat in the cooker. These radiators are heated like ordinary flatirons in 15 or 20 minutes, are then put in place, the food placed in the accompanying utensils and covered, and the radiators do the rest. The roast is browned as when cooked in the ordinary oven.

Meats, poultry, game, fish, bread, cake, pie, vegetables, soup, cereals, in fact, all foods can be cooked in about the same time as required ordinarily and without reheating the radiators.

Food, when done, need not be removed from the cooker, but may be left until convenient, for it is claimed that overcooking and burning are impossible.

The advantages claimed for the best fireless cookers are that they save at least 75 per cent in fuel alone and a wonderful amount of time, labor, and discomfort. All the nutriment and delicious flavors of foods are preserved and the toughest cuts of meat are made tender and palatable.

Lesson XIX

CORN MEAL MUSH

Materials used:

 $\frac{1}{8}$ c milk 2 tb corn meal $\frac{1}{4}$ c boiling water $\frac{1}{8}$ tp salt Utensils needed:

tensus needed:

Double boiler wooden spoon

measuring cup teaspoon

en spoon teasp

tablespoon

Work to be done:

- 1. Fill lower part of double boiler two-thirds full of water and place on fire.
- 2. Pour milk and $\frac{1}{4}$ c boiling water into the upper part of double boiler. Set into the lower part and add salt.
 - 3. When hot, add the corn meal slowly, stirring all the time.
 - 4. Cook it three to six hours.

FRIED CORN MEAL MUSH WITH CARAMEL SAUCE

Materials used:

1 slice cold pressed corn meal mush

to cottolene

2 tb sugar 2 tb water

tp butter

Utensils needed:

2 omelet pans Fig. 35.—Spatula

case knife

spatula wooden spoon teaspoon tablespoon plate bowl

Work to be done:

- 1. Put the cottolene and butter into one of the omelet pans, place on fire and heat.
 - 2. When hot, add the slice of corn meal mush.
 - 3. Brown the mush on one side and then on the other.
- 4. Heat the bowl and plate by dipping into hot water. Wipe dry.

- 5. Place the browned mush on the plate and cover with bowl so that it will keep hot.
- 6. Put the sugar into the second omelet pan and place on a gentle fire.
 - 7. Stir it constantly to keep it from burning.
- 8. Keep it on the fire till the sugar is a delicate brown, then add the water and cook about two minutes.
 - 9. Pour over the mush and serve.

Principles:

Corn meal, like potatoes, is a very starchy food; but, unlike the potato, it has but very little water, and thus can never be

cooked by dry heat, as can potatoes, apples, and other foods that contain much water. For this reason a great deal of water must be added to the meal before it is cooked. Then the heat and the water combined cause the grains to swell so that when done they occupy many times the space they did when first put into the double boiler. Because the corn meal is so dry,



Fig. 36.—Improper Positions at Table

it takes a long time for the starch to absorb enough of the hot water to swell and burst the surrounding wall of cellulose. This also holds true with all the other cereal foods, as oatmeal, rice, cream of wheat, and other preparations. They should always be cooked a long time; for the longer they are cooked the more perfectly is the cellulose broken down and the more perfectly can the body utilize the food.

Serving:

Plain corn meal mush is served with milk or cream for a breakfast food, like any cereal.

Fried mush is served for breakfast or family luncheon. It is served from a platter placed on the table and is eaten with a fork. Most people like a syrup served with it.

Table manners:

RULE: Sit comfortably erect at the table and keep both feet on the floor.

Some of the improper positions taken by people at the table are illustrated in Fig. 36. All of these should be avoided and a dignified, erect posture should be assumed.

Serving guests:

When the dinner is served from the pantry, the guests should be served in rotation alternately at the right and left of the

8	7	6	5
Hostess	1		Host
1	2	3	4

Fig. 37.—Order of Serving

hostess, going in opposite directions for each successive course. Begin with No. 1 and serve successively to No. 8 for first course. Begin with No. 8 for second course and serve successively to No. 1. Continue to alternate in the serv-

ing of the courses. Serve the host and hostess last.

What has been learned:

- 1. All cereals are starchy foods.
- 2. All cereals contain but very little water, hence they can never be cooked by dry heat.
- 3. Because they are so dry, cereals require much longer cooking than do watery foods.
- 4. The longer cereals are cooked, the more perfectly they can be digested.

NOTE TO TEACHERS: As it is impossible to finish the cooking of the mush in one lesson, two lessons have been inserted and the teacher may use either. Pupils may begin the cooking of the mush and at the end of the lesson all of it may be placed in one large double boiler and finished by the teacher. The class may sauté the mush at the next lesson period. Or, the teacher may prepare the mush beforehand and the class simply sauté it.

Lesson XX

STEAMED RICE WITH DATES

Materials used:

Class Rule		Home Rule		
3 tb water	2 tp sugar	3 c water	1 c rice	
$\frac{1}{16}$ tp salt	$\frac{1}{2}$ c cream	1 tp salt	½ lb dates	
1 tb rice	5 dates			

Utensils needed:

Large bowl	paring-knife	small bowl
double boiler	${f spoon}$	pan
strainer	measuring cup	cereal dish
saucepan	Dover egg beater	

Work to be done:

- 1. Put some water in the saucepan and bring it to a boil.
- 2. Measure 1 tb rice. Place the strainer in the large bowl, pour the rice into it, and add cold water enough to wash the rice.
- 3. Take the rice, after it has been washed, out of the bowl. (In this way not a kernel of rice is lost.)
- 4. When the water in the saucepan boils, pour 3 th of it into the upper part of the double boiler. Add the salt and then the washed rice, stirring while adding.
- 5. Put water into the lower part of the double boiler, put the parts of the boiler together, and set the boiler over the fire.
- 6. Cook at least 40 minutes without stirring. Then uncover and let dry and cool.
- 7. With the paring-knife, cut a slit down the side of the dates and remove the stones.
- 8. Put the dates in the saucepan, add a very little water, and cook them till they are soft.
- 9. Put the cream in the small bowl and beat with the eggbeater until it is stiff.
- 10. Add the sugar to the cream and beat until the sugar is dissolved.

Principles:

Rice, which is a cereal very rich in starchy material, swells a great deal when cooked in water, so only a little of the raw material need be used. Dates, like all fruits, are also rich in heat and energy-giving matter, and they add to the attractiveness of a cereal dish because of their rich flavor. The cream, because it is rich in fat, is also a heat and energy food, so the combination of the three makes a very hearty dish. This should not, therefore, be served at a heavy meal.

Serving:

Put the softened dates in the center of a small individual plate. Place the rice around the dates and pour the sweetened whipped cream either over the whole or only around the outside. Eat with a fork.

This dish is most suitable as a dessert for a light dinner, or, better still, at a luncheon where pea or bean purée is served as the main part of the meal. Since the rice dish is so very rich in starchy, or heat and energy-giving material, and the purée in tissue-building material, the combination is very good.

Table manners:

RULE: Sit near enough to the table to maintain an easily erect position while eating.

Serving guests:

When guests are served by passing the courses for guests to help themselves, a style becoming very popular, it is good form to pass the dish to the hostess first, in order that if there be any peculiarity or novelty about the dish, the guests may be saved possible embarrassment by seeing how they are expected to take the food from the dish.

Cleaning up:

- 1. Rinse all sticky, greasy dishes with hot water.
- 2. Rinse starchy dishes with cold water.
- 3. Rinse egg beater as soon as used.
- 4. Soak all cooking dishes well and be sure all are scoured, if necessary.



What has been learned:

- 1. Cereals may be served with fruit.
- 2. A cereal and fruit dish is rich in heat and energy-giving material.
 - 3. Cream adds to this heat and energy-producing value.

Lesson XXI

TURKISH PILAF

Materials used:

Class Rule	Home Rule
½ c rice	½ c rice
½ tb butter	1 tb butter
½ c water	1 c water
½ c tomatoes (1 tomato)	$\frac{3}{4}$ c tomatoes
salt and pepper	salt and pepper

Utensils needed:

Large bowl	omelet pan	paring knife
small bowl	saucepan	spoons
strainer	measuring cup	

Work to be done:

- 1. Wash the rice as directed in the preceding lesson.
- 2. Brown the rice in the butter in the omelet pan.
- 3. Boil the water.
- 4. Add the boiling water to the rice and cook till the water is all cooked away.
 - 5. Remove skins from the tomato as directed in Lesson X.
 - 6. Cut the tomato in pieces and cook in saucepan till tender.
 - 7. Add this stewed tomato to the rice. Mix well.
 - 8. Add the salt and pepper.
 - 9. Cook till the rice is soft.

Principles:

Since rice and tomatoes are both foods which produce heat and energy, they are best combined with foods having other value, as purées, meat, and fish. The vegetable added to the rice, while it does not balance the rice, gives it an added value because of the pleasing combination of flavors. The browning of the rice in the fat changes the color and flavor.

Serving:

This dish may be served at dinner as an entrée (side dish) or at luncheon as the main dish.

When served at a formal dinner and served from the pantry, it may be placed on the dinner plate with the meat.

Table manners:

Rule: Hold the arms close to the sides while eating.

A proper regard for the rights of others is at the basis of this Thrusting out the elbows when cutting meat makes one likely to interfere with his neighbor, besides giving one a very awkward appearance.

Suggestions on Serving:

Meats and vegetables should never be served in glass.

Dishes should be appropriate in size and shape to the food served.

Cleaning up:

Keep the tomato away from tin utensils.

Soak all sticky dishes.

What has been learned:

Rice can be combined with some vegetables to good advantage. Browning rice in fat changes the flavor.

Additional Recipes

BOILED RICE

Class Rule

to gt water 1 to salt 3 c water 1 c rice 1 tp salt

Home Rule

Wash rice and add slowly to the boiling salted water. Boil till soft, drain in a coarse strainer, and pour over it 1 qt of hot water; return to the cooking kettle and let dry. Serve with fresh fruit or jelly.

RICE WITH CHEESE

Butter a baking dish and in the bottom put a one-inch layer of cold boiled rice. Cover well with white sauce, and over this put a layer of grated cheese. Add more rice, more white sauce, and more cheese on top.

Over this sprinkle seasoned bread crumbs and bake 15 or 20 minutes in a moderate oven. Serve hot from the dish in which it is baked. Rice with cheese may be baked and served in individual escallop shells or ramekins. (Shepperd.)

Lesson XXII

OATMEAL MUSH WITH APPLES

Materials used:

 $\frac{1}{2}$ c sugar 3 tb cream 1 apple $1\frac{1}{2}$ c water oatmeal mush To The Teacher: As the pupils cannot complete the cooking of the oatmeal mush in one period, it would be well to prepare this beforehand.

Utensils needed:

Apple corer	granite pan	wood	den spoon
paring knife	case knife	skimmer	
measuring cup		,	•

Work to be done:

- 1. Place the sugar and water in the pan, stir with wooden spoon until the sugar is dissolved, and let boil.
 - 2. Core the apple as directed in Lesson II.
 - 3. Pare the apple, taking off the parings around the apple.
- 4. Cook the apple in the syrup until soft. Do not allow the syrup to boil too hard or the apple may break.
 - 5. When done, remove with a skimmer and place on cereal dish.
 - 6. Fill the apple with hot oatmeal mush.

Principle:

Oatmeal (or more properly, rolled oats) mush, like rice and cornmeal, requires long, slow cooking. Nothing can equal the fireless cooker for this purpose. This mush is very nutritious when properly cooked, and is also easily digested. It makes a fine breakfast food for cold weather because it furnishes heat and energy to the body.

Serving:

Serve the apple and mush with cream. Some serve with sugar also, but those who understand food values think the cream sufficient.

Table manners:

Rule: Put only small portions of food into the mouth at one time.

Suggestions on serving:

Hot food should be served in heated dishes; never serve anything luke-warm.

Food should never be heaped or piled on a dish. Daintiness should characterize all serving.

Cleaning up:

- 1. Pour all remaining syrup into a fruit jar and cover. Set away in the pantry.
 - 2. Wash all the dishes as directed.

What has been learned:

- 1. Oatmeal (rolled oats) requires long, slow cooking.
- 2. Oatmeal mush is a very nutritious food.
- 3. It is an especially good food to serve in cold weather.

Lesson XXIII

CEREALS (Reading)

The Greeks named the grains cereals from the goddess Ceres, whose especial charge was supposed to be taking care of the fruits of the field. Roman and Greek mythology has many beautiful legends exploiting the wonderful deeds of this favorite goddess.

Cereals are the seeds of grasses. The most common ones are wheat, rice, oats, corn, barley, and rye. Cereals are extensively cultivated in every part of the world except the Polar regions. The reasons for their extensive use is due to the fact that they are so cheaply and easily grown; they contain good proportions of necessary food principles with but little refuse; they are easily prepared for the table and are both palatable and digestible; they are easily preserved on account of their dryness and of their compactness of form.

Men very early discovered how to make flour out of kernels of grain and to use it as food. The first method of grinding the flour by means of a pestle and mortar was very crude. Those who have visited a flour mill know how very complicated the milling process of today is, yet the rude implements of ancient times were the first step towards this end.

Corn:

Formerly the word "corn" was applied to any grain. In Scotland it meant oats; in England, wheat. In this country the only grain to which the name is given is the Indian corn, or maize. How it became known to the early American colonists can be learned from history, which tells how the Pilgrims were taught by the Indian Squanto to plant the corn with a fish in each hill as fertilizer.

There are many varieties of corn: flint, having a broad kernel; dent, with a small dimple, or wrinkle across each kernel; sweet, the variety used for cooking purposes; popcorn.

Besides its use directly as a food, corn has a great many uses, the most important of which are: (1) the manufacture of glucose, a substance used in commercial candy-making and also for the gum on the back of postage stamps; (2) the manufacture of cornstarch.

Rice:

Rice is one of the oldest grains, for it was raised in India in ancient times, and a thousand years before Christ was born it formed the chief food of the Chinese. About the time that Columbus discovered America, the people along the coast of Europe began to raise rice, and about two hundred years later, someone brought some rice to our country. In a very short time the production of rice became very profitable to the people who had low, swampy land, such as is found in Georgia, South Carolina, Mississippi, Alabama, and Texas.

Wheat:

Wheat, because it is so commonly used in bread-making and as a cereal in all parts of the world, is sometimes called the

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"King of Cereals." Wheat was first grown in Asia Minor or in Egypt, and it was not until Europeans came to this country that it was brought here.

Among all the cereals wheat is the most perfect food for man. The outer layer of a wheat kernel is hard and useless as food for human beings, but the next layer is rich in tissue-building material, and the central part is starchy; there is oil, or fat, in the tiny germ, but the amount is very small. The whole grain of wheat, after the outside layer has been removed, is made into rolled wheat, puffed wheat, and so forth. Cracked wheat is made by breaking the kernel into pieces; cream of wheat or farina, by grinding the inner part of the kernel into a meal.

Macaroni Wheat:

Macaroni, the manufactured product of macaroni wheat flour, has long been the favorite dish of the Italians, who eat it simply boiled tender or with a white cheese grated over it. They also eat it with a tomato sauce, but do not cut it up as we do. It is said that an Italian gentleman or lady can eat macaroni quite daintily and still in the true Italian style, which means that an unbroken stream of the soft, tubular substance passes from the plate to the mouth. They are as skillful at this queer process as the Chinese are in using chop-sticks. Whenever Campanini, the distinguished baritone, comes to America to sing, he insists on having his macaroni cooked Italian fashion and on eating it Italian fashion, even though he may be in the midst of an astonished crowd in a hotel or café.

The best macaroni still comes from Italy, though it is now manufactured to some extent in the United States. It is made from wheat flour, which is placed in a large vat and mixed with water, first by hand, then by means of a large marble wheel placed above the vat in an upright position. After being churned and mixed in this violent manner for a half hour, it is quite stiff, and when removed, is cut into cakes a foot square and about three inches thick. These are folded into a large steel cylinder which has a bottom perforated with openings that

have their centers filled, and also a cover fitted with a screw. The cover is forced downward by machinery which presses the paste out through the holes at the bottom in the shape of long, slender tubes. These are cut into lengths of three feet and dried over frames covered with oiled paper. The drying process is continued for five days, when the macaroni is ready to be put up in boxes for the market.

The manufacture of vermicelli is similar to that of macaroni, but vermicelli sticks are smaller and not hollow. This is due to the fact that the openings in the cylinder are smaller and have no closed centers. Both macaroni and vermicelli are colored with saffron.

Spaghetti is another form of paste similar in manufacture and use to macaroni, except that it is made into smaller tubes.

Oats:

Oats are supposed to have been first cultivated by the people of northern and central Europe, but not until after wheat had become well known. Oats can be raised in a colder climate than wheat, and so are used more in cold countries. Oats, when eaten by man, are usually in the form of oatmeal and rolled oats. Since oats contain a great deal of starch and also some fat, they are valuable as a heat-giving food. They contain a considerable amount of tissue-building material. They have much mineral matter; hence they are a very good food for children, as they aid especially in the building of bony tissue. The people of Scotland use oats in making a kind of bread which is very nutritious, and they are as fond of oatmeal porridge as the Irish are of potatoes.

It was a Scotchman, who, while talking to an American spoke of the fact that in his country the people used oats as food. The American replied that in his country oats were fed to the horses; whereupon the Scotchman retorted that this accounted for the fact that America had such good horses and Scotland such good men.

Rye:

Rye is a hardy cereal which can be made to grow on poor soil and in a cold climate, though it grows best in a climate suitable for wheat-growing. Rye, when used by man for food, is ground into flour which is made into bread. The poor people of Austria, Germany, and Russia use a great deal of this bread. For people taking but little exercise, rye bread is very beneficial. Barley:

Barley is supposed to have been the first grain cultivated by man. It is still used as food by some of the European peoples, but in America it is seldom thus used except in soups or in the making of barley water for invalids and infants.

Sago:

Sago is obtained from the pith of a certain palm grown for commercial purposes in southeastern Asia, and the neighboring islands. So large is the pith of the sago palm and so full of starch and other nutritious material that three palms are said to yield as much food as an acre of wheat and a great deal more than an acre of potatoes. But, instead of one year, seven are required for the crop to mature. When the palm is seven years old it is cut down, the trunk split, and the pith removed and ground to a powder. The starch and other food materials are separated from the coarse fibre by mixing the ground pith with water and running it over sieves. The starch goes into the water, which is then allowed to stand, when a fine meal will sink to the bottom. Finally, this meal is dried and roasted and made into the pearl sago of commerce.

Tapioca:

Tapioca is made from the roots of a tree which grows in South America, the West Indies, and in parts of Africa and Asia. It is also grown to some extent in Florida and along the Gulf of Mexico. The bitter roots of the tree are washed and ground to a pulp, which is so strained that the starch is all extracted. This starch settles and hardens. It is then broken fine and packed for shipment.

Lesson XXIV

SAGO PUDDING

Materials used:

Class Rule		Home Rule	
2 tb sago	$\frac{1}{6}$ c sugar	½ c sago	$\frac{1}{3}$ c sugar
$\frac{2}{3}$ c milk	pinch of salt	2 c scalded milk	½ tp salt
½ egg	a little vanilla	2 eggs	1 tp vanilla

Utensils needed:

Measuring cup double boiler egg beater teaspoon strainer



bowl knife pan large plate wire whisk

Work to be done:

- 1. Pick over sago carefully, wash, and drain.
- 2. Scald the milk in the double boiler, that is, just bring to a boil.
- 3. Cook the sago in the milk until it is transparent.
- 4. While this is cooking, test the egg to see if it is fresh:

 Fresh egg
 Stale egg

Shell rough and dull-looking Sinks in cold water

Rests on its side in water

5. Wash the egg well and wipe it.

Shell smooth and shiny Floats in cold water Rests on end in water



Fig. 39—Cracking Egg

Fig. 40—Forcing Egg Apart

Fig. 41—Separating White from Yolk

6. Break the egg by holding it in the left hand and striking it sharply in the middle with a knife.

- 7. Hold the egg over a deep plate, place the thumbs at the crack and force the shell apart. Hold the egg in such a position that the yolk will remain in one-half of the shell.
- 8. Slip the yolk from one-half of the shell to the other, letting the white go over the edge into the plate.

(Be sure to separate all the white from the yolk.)

- 9. Slip the yolk into a bowl and beat with Dover egg beater till it is thick and lemon-colored.
 - 10. Mix the sugar and salt with one-half the yolk.
- 11. Add the milk and sago to the yolk slowly, stirring constantly.
 - 12. Return to the boiler and cook until thick.
- 13. While it is cooking, beat the white with the wire whisk until light and dry.
 - 14. Remove sago from the fire.
- 15. Fold in one-half the white to which the flavoring has been added, by putting the spoon in gently edgewise, lifting the thickened sago and turning it over.
 - 16. Repeat until all the white has been added.
- 17. Turn into an individual mold which has been dipped in cold water, and set aside to cool.

Principles:

Egg is a tissue-building food. Its addition to sago, which is a heat-giving food, makes the resulting dish of greater food value.

In whipping the white of the egg, air is beaten in and held by the sticky egg in what might be termed little cases, or envelopes. The beaten white must be carefully folded in the sago mixture so as not to break these little cases. If broken, the air will escape and the mixture be less light and fluffy.

Serving:

Turn out the mold on a small fancy plate or compote dish. Serve with cream and sugar.

Sago pudding may be used as a luncheon dish or a dessert for dinner.

Table manners:

Rule.— Never reach across the table for food. Ask to have it passed to you.

Setting the table:

For luncheon, it is now quite customary to use individual plate, tumbler, and other small doilies instead of a table cloth.

These are not appropriate, however, unless the table is highly polished, or of beautiful wood.

These doilies may be made of fine linen, embroidered or plain, edged with lace or scalloped, or may be crocheted of India twist or of a



Fig. 42.—Table Set with Doilies Instead of Table Cloth

novelty braid and crochet cotton.

A complete luncheon set consists of six (or more) 12-inch plate doilies, six (or more) 8-inch bread and butter plate doilies, six (or more) 4-inch tumbler doilies, and some odd sizes for salts and peppers, and other extra things set on the table, besides a large centerpiece.

Cleaning up:

1. Soak the dishes in which the egg was beaten in cold water, also the upper part of the double boiler. After washing, rinse all dishes in hot water and dry thoroughly.

What has been learned:

- 1. That eggs should be washed before using.
- 2. That a fresh egg is rough and dull-colored and sinks in cold water, lying on its side.
- 3. That eggs and sago make a dish of greater food value than either alone.
 - 4. That air may be beaten into the white of an egg.

5. That folding a beaten egg white into a mixture makes the mixture light.

Lesson XXV

TAPIOCA PUDDING

Materials used:

2 tb tapioca 2 figs

1 c boiling water a little nutmeg and cin-

1 apple namon

a pinch of salt a bit of lemon rind

2 tb cream for serving 1 tb sugar a few drops of lemon juice 1 to sugar

Utensils needed:

Pan saucepan howl strainer or sieve double boiler Dover egg beater

Work to be done:

- 1. Soak the tapioca 1 hr. or more in enough cold water to cover. (This must be done before the lesson period.)
 - 2. Cut apple into small slices.
 - 3. Cook with the figs in a small amount of water.
 - 4. When cooked, drain off the juice and strain.
- 5. Add the boiling water, strained juice and seasonings to the tapioca and put the mixture into the double boiler.
 - 6. Cook until the tapioca is transparent.
 - 7. Dip a mold or cup in cold water.
 - 8. Line it with the slices of apple.
 - 9. Turn the tapioca into the mold and set aside to cool.

Principles:

Tapioca is a heat-giving food. Combined with fruit it has less nutritive value than sago with egg.

Serving:

Add the sugar to the cream and whip in a bowl (Lesson II). Turn the tapioca mold out on a dessert plate or compote dish. Surround with a wreath of whipped cream.

Table manners:

Rule: Never try to talk with food in the mouth.

Setting the table:

For luncheon, small fringed or hemstitched napkins are used.

When cards are used to seat guests, they should be placed on the napkins. Nothing but the name of the guest or the name and a simple decoration are required.

Cleaning up:

After washing the dishes, remember that the towels and washer need hot soapy water, good rinsing, sunshine and air to keep them sweet and clean.

What has been learned:

Tapioca, as well as fruits, furnishes the body with heat.

Lesson XXVI

MACARONI AND CHEESE

Materials used:

Class Rule	Trome Kine		
1 stick macaroni	$\frac{1}{2}$ c macaroni cut into inch		
1 c boiling water	pieces		
$\frac{1}{2}$ tp salt	2 qt (8 c) boiling water		
1 tb flour	1 tb salt		
4 tp milk	$1\frac{1}{2}$ c white sauce		
1 tb grated cheese	$\frac{2}{3}$ c grated cheese		
½ tp butter			
1 tb buttered bread crumbs			

Utensils needed:

Saucepan	teaspoon	measuring cup	grater
sieve	table spoon	bowl	baking dish

Work to be done:

- 1. Break the macaroni into inch pieces.
- 2. Cook in 1 c of boiling water for about 20 minutes.
- 3. Turn into a sieve and drain and then pour cold water over them to keep the pieces from sticking together and becoming pasty.

Home Dule

- 4. Make a white sauce according to directions given in Lesson VII.
 - 5. Butter the baking dish.
 - 6. Put in this dish a layer of macaroni.
 - 7. Sprinkle with grated cheese.
 - 8. Repeat the layers.
 - 9. Pour the white sauce over the layers.
- 10. Cover with the buttered bread crumbs (Lesson IX), and bake until the crumbs are brown.

Principles:

Macaroni is a starchy food. In order to give it greater food value, cheese, which is a tissue-building food, is combined with it. The milk and butter also build tissue, while the butter furnishes energy, so that this is a very nutritious dish.

Such dishes are called *composite* because of their being composed of different kinds of foods.

Serving:

Macaroni should be served hot in the dish in which it is baked. To protect the hands a napkin is usually wrapped about the baking dish unless it be one especially made for this purpose with an outer dish of silver.

Because this dish is nutritious and hearty, it makes a good one for the main part of a luncheon.

Table manners:

Rule: Toothpicks should be used only in private.

Toothpicks, especially when made of wood, are doubtless of great benefit to the teeth, but they should never be used in public. Neither should the tongue search the mouth for scattered particles of food. While this is undoubtedly nature's way of cleansing the teeth, good manners dictate that this, like other acts of the toilet, should be performed only in private.

Serving guests:

It is well to remember that one serves at the *left* if the guest is to help himself from a given dish and at the *right* if the one serving helps the guest to the food.

What has been learned:

A composite dish has the value of the different foods in it, hence may form the main part of a meal.

Additional Recipes

MACARONI WITH WHITE SAUCE

l c macaroni

1 tb salt

2 c boiling water

11 c white sauce

Cook the macaroni in boiling salted water 20 minutes or until soft. Drain. Pour cold water over it. Make white sauce. Reheat macaroni in white sauce.

MACARONI WITH TOMATO SAUCE

Mix ½ c boiled macaroni with a cup of tomato sauce. The addition of a little onion to the tomato sauce gives a pleasing flavor. Add about ½ c grated cheese, turn into a buttered baking dish, cover with buttered cracker crumbs, and bake in hot oven until crumbs are browned.

BAKED MACARONI (1)

Take \(\frac{1}{4}\) lb. macaroni and boil till tender in a stew pan with a little water; warm 1 tb butter in a pudding dish, and put in a layer of macaroni, then a layer of cheese, grated or cut into small pieces; sprinkle with salt, pepper, and small pieces of butter, then add another layer of macaroni and so on, finishing off with cheese. Pour on rich milk or cream enough to come to the top of the ingredients. Bake from 30 to 45 minutes.

BAKED MACARONI (2)

One-half pound macaroni broken in pieces. Pour over boiling water, add a little salt. Boil hard twenty minutes; drain and put in a pudding dish and pour over the following mixture; Two tablespoons flour, two teaspoons dry mustard, one-half pound grated cheese, one pint new milk. Mix mustard and flour into a smooth paste, with some of the cold milk, set the rest on the stove. When boiling add flour, mustard and cheese; cook until it looks smooth, taking care that it does not burn. When done pour over macaroni and bake until a nice brown. Twenty minutes ought to be enough. Be sure to use new milk, as otherwise the cheese will cause it to curdle.

SUGAR

Lesson XXVII

Sugar (Reading)

The plants from which we get sugar are the maple tree, the sugar cane, and the sugar beet. The sugar is first obtained in the form of a thin syrup. To get this sugar from the canes, the stalks are crushed between heavy rollers, and the juice which is pressed out is caught in vessels.

Sugar beets are washed, cut into small pieces, and heated in water until the sugar is dissolved by the water.

The maple syrup is first obtained as sap which rises from the roots to the branches of the maple tree early in the spring. After the sap from any one of these plants is obtained, it is boiled in a large kettle to evaporate the water. When enough water has been driven off, the sugar will begin to form hard lumps, or crystals, in the kettle.

The crystals formed from boiling the juice of the sugar cane or beet are not fine and white like the sugar which comes from the store. There are some dirt and mineral matter and some dark coloring matter in them and they must therefore be cleaned. This process of cleaning is called *refining*. The dark crystals, known as "raw sugar," are dissolved in hot water, which is then strained through cloth and then through bone charcoal. This takes out all the dirt and even the dark color.

Everyone knows how the mud is thrown outward by the buggy wheels when the vehicle is driven rapidly through it. The force that throws the mud outward is called the *centrifugal* force (getting away from the center). This same force is used in separating the sugar from the clear, clean liquid which is obtained by refining. This liquid is put into a machine which

is whirled rapidly. Because the water is heavier than the sugar, it is thrown to the outside, where it is drawn off, leaving the sugar in the center of the machine. The rapid turning of the machine also keeps the sugar grainy and so we get our common granulated sugar. Loaf sugar is made by running the syrup into molds, where it hardens, and then it is sawed into pieces. The broken pieces which are left after this sawing are ground up into pulverized sugar.

After the sugar is made, if both are thoroughly refined, one cannot tell which is made from beets and which from sugar cane, for they look and taste alike. But the poorer qualities of beet sugar show a decided bluish or pinkish color and sometimes a very noticeable blackish tinge. A practiced eye can detect these inferior grades. Some housewives believe that fruit keeps better if preserved with cane sugar instead of beet sugar, and that the latter will not make good candy.

Other kinds of sugar:

There are other kinds of sugar which are less commonly used in cooking. One of these is *grape* sugar. This is sometimes made from grapes, but more often from cornstarch, which is heated by a certain process till it forms a syrup. It is not so sweet as cane sugar and is used principally in making candy and table syrup.

Fruit sugar is a sugar that forms naturally on fruits, especially on grapes and dates when the water evaporates from them.

Milk sugar is made from milk and is used almost exclusively in medicine.

Saccharine, which is really not a sugar at all, but is made from coal tar, is many times sweeter than sugar. It is used to sweeten commercially canned fruits and vegetables, and when so used is considered an adulterant, that is, a substance which makes another impure or of lower quality.

Lesson XXVIII

PEANUT NOUGAT

Materials used:

1 lb. granulated sugar = 2 c.

1 lb sugar

1 qt roasted peanuts

 $\frac{1}{4}$ tp salt $\frac{1}{2}$ tb butter



Fig. 43.—Grinding Nuts

Utensils needed:

Granite pan wooden spoon meat grinder bowl plate flat-bottomed tin

Work to be done:

- 1. Shell the peanuts, remove the brown skins, and put nuts into the bowl.
- 2. Put the meat grinder together, using the largest knife.
- 3. Place the plate under the mouth of the grinder.
- 4. Grind the nuts and sprinkle with salt.
- 5. Place the sugar in the granite pan and melt over the fire.
- 6. Stir with wooden spoon and be very careful not to let it brown. Do not let sugar remain on the sides of the pan.
 - 7. When melted, add nuts.
 - 8. Butter the tin.
 - 9. Pour nougat into the tin.
 - 10. Let cool and cut in squares.

Principles:

One of the uses of sugar is to sweeten food. Fruit, being acid, requires a great deal of sugar to sweeten it. Cake has considerable sugar and bread only a little, if any at all, hence cake is much sweeter than bread.

Sugar is valuable to the housewife as a preservative. Fruit in season cooked with it and placed in air-tight cans can be kept for winter use, the sugar acting as a sweetener and a preservative.

SUGAR 81

Sugar, like starch, supplies heat and energy to the body, but as it dissolves more readily than starch, the body digests it more easily. If more sugar is eaten than the body can use, it is changed into fat and stored in the body.

Nearly everyone is fond of sweets, but children seem to care more for them than do older people, probably because they move about so much that they need more energy-building food.

When a sweet is made with a great many nuts, it forms a nearly perfect food. Nuts contain a great deal of fat, and some tissue-building food, and the sugar furnishes heat and energy. Peanuts, although not really nuts, but legumes, are especially rich in oil, and for this reason, peanut nougat forms a very desirable sweet for children.

Serving:

Because of the tendency of the young to overeat of sweets, and thus create a distaste for other foods, it is well to eat the candy as a dessert or accompanying dessert.

Take one piece of candy at a time and handle daintily with the fingers of the right hand. If one has candy tongs, they should be used to take the candy from the dish.

Table manners:

Rule: Sticky fingers should be cleaned with the napkin.

It is no uncommon thing to see children and even young people lick off the ends of the fingers after eating candy. This is a habit which ought to be corrected.

Setting the table:

If one has choice bonbon dishes that will add to the appearance of the table, they may be placed upon the table at equal distances from each other and from the vases and candles, if the latter are used, although, as stated in Lesson XIII, it is customary to set such dishes upon the sideboard or table.

Cleaning up:

- 1. The grinder should be cleaned in hot water after each using, and each part carefully dried before being put away.
 - 2. The nougat pan and tin should be soaked in hot water.



What has been learned:

- 1. Sugar is used for sweetening and preserving foods.
- 2. Sugar is an energy-producing food.
- 3. Sugar is more easily digested than starch.
- 4. Excess of sugar in the body is stored as fat.

Additional Recipes

PINOCHE

2 c brown sugar

4 tb butter 1 c nut meats

15 drops vanilla

Boil the sugar, milk, and butter until a soft ball can be formed in cold water. Remove from the fire, add nuts and vanilla, and beat until creamy. Pour into buttered pans to cool. Cut in squares.

SUGARED POPPED CORN

2 qt popped corn

2 c brown sugar

2 tb butter

c water

Put butter in the saucepan, and when melted add sugar and water. Bring to the boiling point and let boil sixteen minutes. Pour over the corn, stirring the corn until every kernel is coated.

Lesson XXIX

CHOCOLATE FUDGE

Materials used:

1½ c sugar

1 sq Baker's chocolate

c water or milkto butter

or 4 tb cocoa to vanilla

Utensils needed:

Wooden spoon

buttered platter or pan

tablespoon teaspoon

granite pan

cup

Work to be done:

- 1. Place sugar, water, butter, and square of chocolate in the granite pan.
 - 2. Boil. Do not stir after boiling has commenced.

case knife

- 3. Test by letting a drop fall into a cup of cold water. When it makes a round, soft ball which can be rolled in the fingers, it is done.
- 4. When done, remove from fire, add vanilla, and set aside to cool.
- 5. When so cool that it will not burn the fingers, stir with the wooden spoon until it begins to thicken.
 - 6. Turn it on the platter or tin and allow to cool.
- 7. If desired, walnuts, pecans, or hickory nuts may be added when the stirring begins.

Candy maxims:

"When cooking sugar for candy, use a granite or iron pan, as the sugar is less likely to burn in these than in tin."

"Butter pans for candy before the candy is cooked."

"When the candy is poured into the pan, do not scrape the cooking pan over it nor allow any of the scrapings to fall into it.

"Scraping or stirring the candy while cooking will cause it to become sugary."

"Acids, like lemon juice or cream of tartar, added to candy while cooking will keep it clear."

Caution:

Great care must be exercised when making candy to take it off the fire at just the right moment; if allowed to cook too short a time, the candy will not harden; if too long a time, it will become hard and sugary.

Table manners:

Rule: Dip the tips of the fingers in the finger bowl and dry on the napkin.

Serving guests:

Finger bowls should be passed after any course that requires the fingers to touch the food. These should be set on a small dessert plate upon which is a dainty doily, and placed in front of each guest from the right. The pretty Japanese custom of dropping two or three flower petals in the water before passing the finger bowl has been adopted in this country.



Additional Recipes

NUT BARS

Cover the bottom of a buttered shallow pan with 1½ c nut meats (any kind desired) cut in quarters. Pour over these one pound sugar melted as for peanut nougat. Mark in bars.

NOUGAT

An excellent nougat is made of one cupful of almonds, chopped and placed in the oven to dry. Be careful not to allow them to brown. Put into a saucepan two and a half cupfuls of powdered sugar and a tablespoonful of lemon juice. Place the mixture on a fire and stir with a wooden spoon until it is melted and slightly colored. Let it stand for a few minutes, so it will be thoroughly melted, then turn in the hot almonds, mix them together quickly, not stirring long enough to grain the sugar, and turn it onto an oiled slab or tin. Spread it out in an even sheet an eighth of an inch thick. While it is still warm mark off into squares. Break into pieces when cold.

COCOANUT FUDGE

Boil together until when tested in cold water the syrup forms a soft ball, 2 c granulated sugar and 1 c rich milk. Just before taking from the fire, add 1 tb butter and a few drops of vanilla extract.

When the syrup cools add some shredded cocoanut and beat until the mixture begins to thicken, then turn quickly into oiled tins. Set aside to cool, cutting into bars and squares when the fudge has set.

NUTS

Lesson XXX

PEANUT AND POTATO COMBINATION

Materials used:

 $\frac{1}{2}$ c mashed potato 2 tb chopped peanuts

½ tp butter ½ tp salt

1 tp milk

Utensils needed:

Saucepan meat grinder spoons pan baking dish knife paring knife bowl fork

Work to be done:

- 1. Wash, pare, and cook potato.
- 2. Shell and grind nuts as directed in Lesson XXVIII.
- 3. Mash and cream potato.
- 4. Add nuts, butter, milk, and salt to potato.
- 5. Cream all ingredients thoroughly.
- 6. Butter the baking dish and put the mixture into it.
- 7. Bake in moderate oven till thoroughly heated through and browned on top.

Principles:

Potatoes, being a starchy food, and nuts, being an oily food, make a composite dish of much food value.

Serving:

This dish should be served in the dish in which it is baked. It may form the main part of luncheon.

Table manners:

RULE: Talk only on cheerful subjects during meals.

It is stated on good authority that cheerfulness aids the digestion of food. To prove the truth of this one has only to

note how quickly the desire for food passes away and how quickly the digestive organs become inactive under the stress of strong feeling. Light, pleasant conversation with occasional laughter adds to the enjoyment of eating and aids digestion.

Cleaning up:

1. Clean meat grinder, desk, stove, and oven perfectly, and put utensils in their proper places.

What has been learned:

2. Potatoes and peanuts together have nutritive value because they furnish different food principles.

Additional Recipes

PEANUTS AND RICE

One-half cup rice cooked in 3 c water and drained. Add 1 c dry bread crumbs, $\frac{1}{4}$ c chopped nuts, 1 tp salt, 1 egg slightly beaten, $\frac{1}{2}$ c milk.

Stir together and put in a buttered or crumbed baking dish. Cook in a moderate oven 25 minutes.

SALTED ALMONDS

The nuts must first be blanched, that is, whitened by being put into boiling water to remove the brown skin. Let boil for a minute or two, then plunge into cold water, when the skins may be easily removed with the fingers. (English walnuts need longer cooking and a knife will be needed to remove the skins.)

Put the blanched almonds into a pan with melted butter and set the pan in a moderately hot oven. Stir frequently so that they will be a light brown on all sides. Sprinkle with salt while hot. Or,

Fry the blanched nuts, a few at a time, in a small saucepan of olive oil to a delicate brown, stirring meanwhile; remove with a skimmer, drain on soft paper, and sprinkle with salt.

Blanched raw peanuts, pecans, English walnuts, or roasted peanuts from which the skin has been removed, are salted and served the same as almonds.

Lesson XXXI

Nuts (Reading)

Definition and description of nuts:

A nut is the fruit of certain trees and shrubs. A typical nut consists of three parts: (1) the inner part, or kernel; (2) the

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brown coat, or epidermis covering the kernel, and (3) the hard, woody outer shell.

The kernel can be easily removed from the shell by crushing the latter. The brown covering of the kernel can be removed only by plunging the kernel into boiling water for a minute or two, after which the brown skin can be easily removed by pressing between the fingers. Usually, however, the skin is eaten with the kernel.

Place of nuts in the diet:

Nuts should form a more important part of our diet than they commonly do. Like the legumes, they are very rich both in starch and in tissue-building food. But, unlike the legumes, they are also rich in fat. For this reason, they make an almost perfect food, and when they can be bought for ten cents a pound, they are one of our cheapest foods.

The old-fashioned way of eating nuts was to serve them at the end of a meal. Even now it is thought that no Christmas or Thanksgiving dinner is complete unless nuts and raisins are served with dessert. These dinners usually furnish a plentiful supply of the food elements, and when nuts and raisins are added, the stomach becomes overloaded. As a result, it rebels, and various digestive troubles follow. It is this unwise use of nuts that has given to them the reputation of being difficult to digest.

When the real food value of nuts is known and is taken into account, they cannot be found otherwise than beneficial when used as a part of our meals. They should not be used as a sort of after-dessert, but rather as an important source of tissue-building food. For instance, if no meat is supplied in the meal, the tissue-building material might be supplied by English walnuts, pecans, or other nuts; or they might take the place of a heavy pudding or other rich dessert.

Another favorite way in which to use nuts is to serve them as a side dish at dinner or luncheon. Almonds are most often used in this way, but peanuts may also be so served.

Vegetarians (those who do not eat the flesh of animals) often grind nuts in the meat grinder, mix them with some cereal or vegetable and bake or sauté the mixture. Such a dish is suitable to serve as a meat course.

But if nuts are to be introduced into the daily bill-of-fare, it must be remembered that they should be very thoroughly masticated; in fact, they should be retained in the mouth until they are reduced to an exceedingly fine pulp. If this is done, there is no reason to suppose that they are less digestible than other tissue-building food.

Kinds of nuts:

Nuts of some kind grow in all regions from the arctic to the torrid zone; but the most important nuts of commerce are those of the temperate and torrid zones. Those growing in the temperate zone are the hickory, English walnut, black walnut, pecan, filbert, and pinon. The nuts of the torrid zone are the almond, Brazil nut, and cocoanut. Our principal food nuts are almonds, English walnuts, cocoanuts, pecans, Brazil nuts, hazelnuts, chestnuts, and hickory nuts.

Almonds:

Almonds are raised to a great extent in California, but by far the greater quantity used in this country are imported from Spain and the other Mediterranean countries. There are two kinds of almonds: the sweet and the bitter. Only the sweet almonds are eaten; almond extract and prussic acid are made from the bitter variety. Sweet almonds are eaten either raw, cooked in cake and candies, sugared or salted. Almond trees in bloom look very much like peach trees, and the fruit is like the peach, but it has a thinner pulp which shrinks up when the fruit ripens and the nuts fall to the ground.

English walnuts:

English walnuts are grown in large quantities in California, but many must also be imported from France, Spain, and Italy, to supply the demand in this country. In California, the season lasts from the middle of September to the last of November.



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During the busiest part of the nut gathering season, all the men, women, and children of the neighborhood turn out to gather the harvest. As soon as the nuts are gathered, they are carried to the drying trays where they are spread out about five inches thick and allowed to remain until they are perfectly dry. The walnut when gathered has not such a white shell as the ones bought in the market. After they are dried, they are sent to a place where they are bleached by chemicals and water and again dried. They are then ready to be shipped.

The black walnut and the butternut are cousins of the English walnut which grows in many parts of the United States.

Pecans:

The pecan grows in large quantities in the southern Mississippi Valley, and in the Gulf States. The trees are set about forty feet apart and begin to bear when about six years old. One tree may yield many bushels of nuts.

Chestnuts:

Chestnuts are not natives of this country. The seeds were brought here from Italy and planted; cuttings from trees grown in Europe are grafted onto chestnut sprouts which have been raised from seeds. These grow well and furnish chestnuts as good as those which come from abroad.

Because of their great starch content, chestnuts should never be eaten raw, for raw starch is hard to digest. For this reason, chestnuts are usually roasted over coals much as popcorn is popped. In France the people steam the nut meats or cook them in other ways before they eat them. We often use nuts in turkey dressing.

Brazil nuts:

As the name indicates, these nuts come from Brazil. They grow from ten to twenty in a pod, or hard shell which is nearly as large as the human head. These nuts contain a great deal of oil; in fact, it is said that if the kernel is extracted whole from the shell, set on end and lighted, it will burn. This can be done only when the nut is quite fresh; if it is somewhat old,



it may be cut into strips and these will take fire when a lighted match is applied. It is this oil which becomes rancid and gives the disagreeable taste to the old nut.

Cocoanuts:

Cocoanuts are a product of a tree of the palm family. The nuts grow in large bunches underneath the cluster of leaves which crowns the top of the tree. A good tree will produce a hundred nuts a year; these drop off when they are ripe. The outer husks are removed before they are shipped to market.

The meat of the cocoanut is sometimes eaten raw, but we use it mostly in the form of shredded or dried cocoanut. There is a great number of other products of the cocoanut palm.

Pistachio nuts:

This nut, which grows in Syria, has a peculiar light green color, and for this reason it is often used for coloring ice cream and other desserts; almond flavor is then used in combination with it.

Pinons:

This nut is the seed of one variety of the great California pine trees. The cones of these trees sometimes grow a foot long. The seeds, which are the pinons of commerce, grow between the flakes of the cones. This nut is used a great deal in candy and cakes.

Peanuts:

Peanuts are really not a nut at all, but a legume. But unlike peas and beans, peanuts contain, besides the starch and tissue-building material, a large amount of fat. The starch content is so large that it must be roasted before it is good to eat. After roasting, its flavor is very much like that of a true nut and very delicious.

Peanuts are thought to be a native of Brazil. They are now raised in all warm regions of the globe; in the United States, Virginia perhaps leads in their production. Enormous quantities are used in this country, and hundreds of bushels are exported to Europe.

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Before the peanuts are planted, the kernels are removed from their pods. Care must be taken not to break the brown skin which covers the kernels, for if this is broken, they will not grow. They are planted in rows three feet apart, just like corn, and the kernels two feet apart in the rows.

When they come up, they are cultivated much as our corn is, but the field looks much like a field of clover. After a few weeks, small yellow flowers appear on the vines. These fall off after a short time. As soon as they have fallen off, the stem shoots downward and buries its tip in the soil. At the tip the peanuts are produced.

When these are ready to be harvested, the whole plant is plowed up much as we plow up potatoes. Negro men, women and children go over the field and pile the vines with the peanuts clinging to them in heaps. The vines are left in these heaps for several days, or until the pods can be removed from the vines. The vines are then fed to the cattle.

As the nuts grow in the soil, they are dirty. This dirt is removed in factories with machinery which works somewhat like the fanning mill with which grain is cleaned. After the nuts are cleaned, they are sorted, those poorest in quality being sent to candy factories to be made into candy. The other two grades are placed in sacks to be shipped all over the country or perhaps to Europe.

Peanuts are chiefly used for eating at odd times; but because of the large amount of nutrients they contain, they ought to become more regularly a part of our diet.

Some of the peanuts sent to France are crushed to extract the oil in which they are very rich. This oil looks and tastes much like olive oil and is used in the same way. Large quantities of peanut oil are now made also in this country. It is used for salads and also in cooking to take the place of lard.

Peanuts are also crushed very fine and the oil retained. This crushed product is packed into jars and sold as peanut butter. It makes very wholesome and nutritious sandwiches.

EGGS

Lesson XXXII

EXPERIMENTS

Materials used:

3 eggs

Utensils needed:

3 granite pans with covers case knife

3 dishes into which to empty eggs

Work to be done:

- 1. Place one egg (unbroken) in rapidly boiling water and allow it to remain there three minutes. Then remove from the water.
- 2. Place another egg in rapidly boiling water and allow it to remain ten minutes, then remove from the fire.
- 3. Place the last egg in enough rapidly boiling water to cover the egg, take the pan off the fire, but do not set it where a current of cold air will strike it. Allow the egg to remain in the water ten minutes.
 - 4. Break open the first egg and examine the contents.
- 5. Break open the second egg, examine the contents, and compare with the first.
 - 6. Do the same with the third egg.

Principles:

The egg which is cooked in boiling water for three minutes, when cut open, will be seen to have the outer layers of the egg-white very hard and firm, the inner layers less so, and the yolk will seem not to have been affected at all by the heat. This method of cooking eggs is not a good one because the heat does not get time to penetrate to the yolk, hence the yolk is not cooked. The white being nearer the shell comes in contact

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with the heat so it is often cooked too hard. This is especially likely to be true of the outer layers of the white.

The egg which is cooked in boiling water for ten minutes will appear quite different from the first egg, in that the yolk and the white will both be very solid, and the white, especially, will be tough. Physicians who have experimented with the digestibility of eggs tell us that when eggs are cooked so long and at such a high temperature they become tough. Eggs thus cooked are not so easily digested as are eggs cooked at a lower temperature and for a shorter period of time. Hence this method is not a good way of cooking eggs.

The white of the egg which was cooked in hot, but not boiling water, will be found to be solid, but very tender and delicate. The yolk will not be solid, but it will show the effect of the heat. This is the best way of cooking eggs because they are tender, delicate, and easily digested. If eggs are desired soft, they should be left in the water a shorter time; if hard, a longer time. But in cooking eggs this way one must be sure to have them covered with plenty of water, and not to expose the pan in which they are cooked to a current of cold air so that the contents become cooled too quickly.

Cleaning up:

Soak egg dishes in cold water. Hot water cooks the egg and causes it to adhere more closely to the sides of the dish, but cold water dissolves the egg so that it can be removed with ease from the sides of the dish.

Wash and put away all utensils according to previous directions.

What has been learned:

- 1. Eggs cooked in such a way that they are tough and hard are difficult to digest.
- 2. Eggs cooked below the boiling point are tender in texture, delicate in flavor, and easy to digest.
 - 3. Egg dishes should always be soaked in cold water.



Lesson XXXIII

POACHED EGGS

Materials used:

1 egg 1 tb butter 2 drops vinegar 1 slice stale bread salt and pepper

Utensils needed:

Omelet pan skimmer plate case knife



Trimming Bread

Fig. 45.— Placing Egg on Toast; Breaking Egg in Pan

Work to be done:

- 1. Trim the crusts from the slice of bread, making it oblong in shape, but do not waste the bread; put the crumbs and crusts in a pan to be dried for bread crumbs.
- 2. Light the broiler in the large range. Place bread on the rack and toast it on both sides or put between the parts of a wire toaster and toast over the flame.
 - 3. Butter toast and place on warm plate.
- 4. Place water in omelet pan, add two drops of vinegar and bring to a boil, then lower the flame so as not to allow it to continue to boil.
- 5. Break the egg with a knife and drop into the water. The water should not quite cover the egg.
- 6. Allow the egg to remain in the hot, but not boiling, water until the white is quite firm, or jelly-like, and the golden yolk shows through a veil of white.

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7. Remove with the skimmer and place on the toast without breaking.

Principles:

Slightly stale bread is better for toasting than fresh bread because it has lost some of its moisture and therefore browns more quickly and evenly. Very dry bread should never be used for toast unless milk or water toast is to be made, for it makes a hard, dry piece of toast. The best toast is made directly over a bed of coals. It should first be held at some distance to dry out the moisture, then nearer to give the golden brown color.

It may be buttered as soon as toasted, but is more easily digested if buttered just before eating.

The poached egg should never be cooked in boiling water, for boiling water will make the white tough and some of it may be broken off and wasted in the water.

Eggs are a tissue-building food. This material in the white is called albumen. Albumen is soluble in water, hence some of it may be lost when the egg is dropped into water. To prevent this, the vinegar is first put in. This coagulates (i.e., hardens) the white so it will not dissolve.

Serving:

Poached egg on toast is one of our best breakfast dishes. Stale bread being easy to digest, this is also a good dish for invalids. When served at a family breakfast, the eggs on slices of toast may be placed on a large platter and served from the table, or brought in on individual plates. They should be cut with the knife and eaten with the fork.

Table manners:

Rule: Do not hold the knife and fork upright on the table.

Garnishing of food:

The garnish should be simple and so placed as not to interfere with the food.

Cleaning up:

Place egg shells in the garbage can.

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Place crusts and crumbs in a pan to be saved for bread crumbs. Soak all the dishes which have had egg in them in cold water. Wash and put away all dishes and utensils.

What has been learned:

Use slightly stale bread for toast.

Poach eggs in hot, not boiling, water.

Albumen is the tissue-building material in the white of eggs Albumen is soluble in water; vinegar hardens it.

Lesson XXXIV

PLAIN OMELET

Materials used:

Class Rule	Home Rule			
1 egg	1 egg for each person			
1 tb water	1 tb water for each egg			
$\frac{1}{16}$ tp salt	$\frac{1}{3}$ tp salt			
1 tp butter	1 tb butter			
For white sauce:	For white sauce:			
½ c milk	2 c milk			
$\frac{1}{2}$ tb butter	2 tb butter			
$\frac{1}{2}$ tb flour	$2 ext{ tb flour}$			
$\frac{1}{16}$ tp salt	$\frac{1}{2}$ tp salt			
Itensils needed:				
0 14 10 1				

TT

Omelet pan Dover egg beater tablespoon case knife 2 bowls mixing spoon teaspoon small plat:

Work to be done:

- 1. Make white sauce according to directions in Lesson VII or VIII, and place where it will keep hot.
- 2. Break and separate the egg, placing white in one bowl and volk in the other.
 - 3. Beat the volk until thick and lemon colored.
 - 4. Add salt and water to the yolk and mix. 00.
 - 5. Beat white until stiff and dry.
 - 6. Add white to the yolk and mix by folding, never by stirring.

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- 7. Place butter in pan and heat.
- 8. Add the mixture.
- 9. Cook on the top of the stove until browned underneath, then place on the upper grate of the moderately hot oven.
- 10. Test with the fingers. When done, no dents made by the fingers will remain on the surface.
- [?] 11. Remove from oven. Hold the pan in the left hand. With a knife in the right hand, cut across the center of the top at right angles to the handle of the pan.



Inverting Omelet on Platter (13)

Fig. 46.— Omelet Folded (12) Ready to Serve (14)

Cutting Omelet (11)

- 112. Fold the half nearest the handle over onto the other half.
- 13. Place hot platter or plate over the pan and invert so that p atter is beneath pan. Be sure to arrange platter and pan so tl at the omelet will fall in the center of the platter.
- 14. Surround with hot white sauce and garnish with parsley. **Principles:**

The object in beating eggs is to beat as much air into them as possible so that they will be light. To get the best results, use a round-bottomed bowl for the Dover egg-beater or a platter for the wire whisk or fork.

Whites are beaten "stiff," when they do not fall out when the bowl is inverted; they are beaten "dry," when the gloss is gone from them and little flakes of white fly off during the beating.

Yolks should be beaten in a round-bottomed bowl with a Dover egg beater or fork. When they are well beaten, they are thick and much lighter colored.

Eggs are beaten slightly when the yolk and white are well mixed and the whole is smooth and creamy. Custards and some sauces are beaten in this way.

Eggs are beaten till "light" to entangle fine bubbles of air, but more air can be beaten into the egg when the yolk and white are beaten together than when beaten separately.

When egg mixtures into which a great deal of air has been beaten are placed in a hot oven, the heat causes the air to expand that is, to occupy more space, so that it needs to make more room for itself. To do this it must push the walls of the mixture which surrounds the air bubbles farther and farther out.

The heat hardens, or coagulates, the albumen, so that when the mixture is removed from the fire, the walls around the air bubbles have hardened, and a light, porous food is the result. The water which was added to the yolk becomes steam when heated and this helps to make the omelet light. But because there is no flour added to the mixture, there is nothing present which will keep the thin walls of albumen hard, so when the omelet cools, the steam becomes water again, the air shrinks in volume, and the walls of albumen, being relaxed from pressure, collapse, or fall together. For this reason, the omelet must be turned at once upon a hot platter, surrounded by boiling hot white sauce and served at once.

"It is better to wait a minute for an omelet to be served than to have the omelet wait a minute to be served."

Serving:

Omelets may be used either as a breakfast or as a luncheon dish, and they also make a good dish for invalids. They should be served from a platter, but never by cutting with a EGGS 99

knife into individual portions; a spoon should be used for this purpose. An omelet should be eaten with a fork.

Table manners:

Rule: Do not gesticulate with the knife or the fork.

Garnishing the food:

A garnish must be edible, that is, fit to be eaten, and should be appropriate to the food served.

Omelets may be varied by the use of fillings or garnishes, or both. The filling finely chopped may be mixed with the omelet or it may be mixed with a sauce and sprinkled over the surface of the omelet before it is folded. Green or canned peas, fresh or canned mushrooms, oysters, finely chopped ham or chicken and asparagus tips in white sauce, are used, also macaroni in tomato sauce. When used as a garnish, the sauce is simply poured around the omelet.

Cleaning up:

Soak the pan in which the white sauce was made and the egg beater in cold water. Remember not to wet the cogs of the Dover beater.

Clean and put away utensils as usual.

What has been learned:

Eggs are beaten to get air into them.

Air in a mixture expands in cooking and makes the mixture light.

The absence of flour in an omelet to give "staying power" to the walls of albumen, causes the walls to collapse quickly after cooking, therefore an omelet must be served hot.

Whites of eggs are beaten "stiff," when they do not run when inverted, and "dry," when they lose their gloss and fly off in flakes.

NOTE: A variation of the plain omelet may be made by scalding a little parsley, pouring off the water, chopping it, and mixing it with the omelet just before pouring it into the pan.

Old cheese grated and added to a plain omelet is a favorite dish.



Lesson XXXV

SCRAMBLED EGGS

Materials used:

Class Rule		Home Rule
1 egg		5 eggs
$\frac{1}{2}$ tb milk or cream		$\frac{1}{2}$ c milk or cream
1 tp butter	•	2 tb butter
½ tp salt		1 tp salt

Utensils needed:

Omelet pan tablespoon teaspoon bowl egg beater Work to be done:

- 1. Break eggs into the bowl and beat slightly.
- 2. Add salt and milk. Mix well by stirring.
- 3. Place butter in the omelet pan and melt.
- 4. Add the mixture to the butter and place over low fire.
- 5. Cook, scraping continually from the bottom of the pan in such a way that that part of the mixture which is cooked shall come on top and that which was on top shall go to the bottom.
- 6. The last of the cooking should be done by the heat of the pan alone.
- 7. Do not let the eggs brown nor cook too hard. They should have a custard-like appearance.

Principles:

Physicians tell us that the white of eggs is more easily digested when it reaches the stomach in a finely divided state. For this reason, one should chew eggs very thoroughly. Many think that when the white and yolk are beaten together before cooking, as in scrambled eggs, they are more easily digested because of the finely divided state of the whites.

Serving:

Scrambled eggs are a breakfast dish which should be served hot. They may be heaped in the center of a platter surrounded by bacon sautéed until crisp, or they may be varied by adding any of the materials which may be added to omelets. When such are to be added, they should be chopped fine and added to the mixture before it goes into the omelet pan: Scrambled eggs may also be served alone, garnished with a few sprigs of parsley or may be served on toast.

Table manners:

RULE: Approach the right side of a chair at the table and rise from the same side.

Garnishing of food:

Dainty ways of serving food have a value other than that of beauty. A feeble appetite is often tempted by a tastefully garnished dish, and many cheap articles of food and "left-overs," when made attractive, may be just as appetizing as more expensive ones.

Cleaning up:

Observe directions given before for egg dishes.

Be careful to rinse and dry well all the utensils used.

What has been learned:

The stomach more readily digests white of egg when it is divided into very fine particles.

Lesson XXXVI

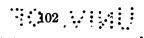
Custards

NOTE TO TEACHER: In this lesson divide the class into halves, letting each alternate girl make yellow custard, the others white custard.

YELLOW CUSTARD

Materials used:

Home Rule
4 c scalded milk
4 eggs
. ½ c sugar
½ tp salt
a few grains of nutmeg
or cinnamon
1 tp butter



DOMESTIC SCIENCE

WHITE CUSTARD

Class Rule

White of one egg

1 tb sugar

a very little salt

½ c scalded milk

tp vanilla 1 to butter

Utensils needed:

Double boiler

egg beater

measuring cup

bowl

teaspoon strainer

Home Rule

whites of 4 eggs

1 c sugar

tp salt

2 c scalded milk

½ tp vanilla

1 tp butter

pan containing hot water mold (in which to bake

custard) case knife silver knife

YELLOW CUSTARD

Work to be done:

1. Place milk in double boiler to scald. (When bubbles appear on the edges, it is scalded.)



Fig. 47.—Straining Custard into Mold

Fig. 48.—Testing with Knife

- 2. Break whole egg into the bowl and beat slightly.
- 3. Stir in the sugar and salt.
- 4. Add scalded milk, stirring slowly all the time.

- 5. Butter the mold.
- 6. Strain the mixture into this mold.
- 7. Sprinkle a little nutmeg over the top.
- 8. Set the mold in the pan containing hot water and place in a moderate oven.
- 9. To test the custard, insert a silver knife in it. When the knife comes out clean, the custard is done.

WHITE CUSTARD

- 1. Scald the milk as for yellow custard.
- 2. Beat the white of egg slightly, and add sugar and salt.
- 3. Add milk and proceed as directed above.

Principles:

Custards are a combination of eggs and milk cooked just enough to give firmness to the albumen. In the best custards nothing but eggs, milk, sugar, salt, and flavoring are used. Two yolks may satisfactorily be used as one egg. Starches are sometimes added, in which case fewer eggs are needed, as the starch helps to give the necessary firmness.

There are two classes of custards, the firm and the liquid, due to a difference in the way they are cooked. The latter are stirred all the time that they are cooking, while the former are not touched.

There is also a difference in the place each has in a ménu, the liquid serving simply as a sauce to other dessert, while the former is itself a dessert.

In both cases the vessel in which the custard is cooked should be placed within another of hot, not boiling, water, for eggs should be cooked below the boiling point.

A liquid custard is done when a silver spoon inserted in it becomes coated. A firm custard is done when the albumen has become so set that it gives a jelly-like consistency to the whole mass and a silver knife thrust into it comes out clean.

When a custard is full of holes, or curdles, or becomes watery when cut, it has been cooked at too high a temperature.

Serving:

Custards belong in the list of dishes served cold. They are used as desserts at luncheon or dinner. If baked in individual molds, they may be served in them, but it is better to turn each out into a suitable individual dish, and serve. When served from a large dish, place this in a casserole and place upon the table in front of the hostess with the individual serving dishes at her left, or if there is no casserole, fold a napkin about the large dish and set on a large round platter for serving.

Table manners:

Rule: Speak only in low well-modulated tones at the table.

A loud voice is never in good taste in company, and least of all at the table. When one person talks in a loud voice, no one else can converse with ease, and it amounts to a monopoly of the conversation by one — which is never in good taste. Low, pleasant tones are one mark of good breeding.

Cleaning up:

Observe the directions for egg dishes.

What has been learned:

- 1. There are two kinds of custards, the firm and the liquid.
- 2. Liquid custards are used as sauces; firm custards are used for desserts.
- 3. Liquid custards are stirred while cooking; firm custards are not.
- 4. Liquid custards are done when the inserted knife is coated; firm custards are done when the inserted knife is clean.

Lesson XXXVII

CARAMEL CUSTARD

Materials used:

Class Rule		Home Rule	
$\frac{1}{2}$ c scalded milk	$\frac{1}{16}$ tp salt	4 c scalded milk	$\frac{1}{2}$ tp salt
$\frac{1}{2}$ egg	½ tp vanilla	5 eggs	1 tp vanilla
2 tb sugar	½ tp butter	1 c sugar	1 tp butter

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Utensils needed:

Granite pan egg beater tablespoon double boiler measuring cup case knife bowl teaspoon mold

Work to be done:

1. Scald milk in double boiler.

2. Place sugar in the granite pan and melt as directed in Lesson XXII.

3. Add scalded milk to the melted sugar and cook, stirring until all lumps have disappeared.

4. Break egg and beat carefully.

5. Take one-half the egg and add salt and flavoring.

6. Add milk and sugar mixture and stir slightly.

7. Butter the mold and pour the mixture into it.

8. Bake as yellow custard is baked.

Facts of interest about custards:

If an egg is used to each cup of milk in making a custard, a delicate consistency is secured. Such a custard is not firm enough to be turned out, hence must be served in its own dish.

If more eggs are added, the custard is firm enough to turn from the mold.

Whole eggs or whites and yolks separately may be used for custards, the richest being made from yolks alone, but such a custard breaks too easily to be turned from the baking dish unless the whites of eggs are added. For liquid custards, yolks alone are preferable, but sometimes the whites beaten stiff are added at the last, this giving the custard a foamy, fluffy texture.

As a rule, eggs in custards are not beaten till light because custards are firm and rich rather than light.

Principles:

Custard ingredients are simple, of the richest nutritive value, and very easily digested by man. They are combined in the same way as for scrambled eggs, hence have the same food



value. In order to insure their digestibility, custards, like all egg combinations, must be cooked below the boiling point.

A custard is a perfect food because it contains all the food elements, tissue-building material, heat and energy-giving materials, and mineral matter. For this reason, custards make a splendid food for all the members of the family, young and old, sick and well.

Custards admit of many flavorings. Of these the most common are chocolate, grated cocoanut, crumbled cocoanut cakes, soaked macaroons, chopped almonds, candied fruits, caramel, and lemon, orange and other highly colored jellies cut in cubes.

Serving:

Serve as directed under "Yellow Custard."

Table manners:

Rule: Stand at the back or side of the chair until the hostess gives the signal to be seated.

To hasten to the table and seat one's self before others argues a greed for food or a selfishness that is ill-bred.

Seating guests:

The guest of honor, if a lady, is placed at the right of the host; if a gentleman, at the right of the hostess.

Cleaning up:

Take care of the dishes in the way directed in other lessons on eggs.

What has been learned:

- 1. One egg to each cup of milk makes a custard which can be served from the mold.
- 2. Whole eggs, yolks alone, or whites alone, may be used with the milk.
 - 3. Yolks make the richest custards.
 - 4. Custards are a perfect, easily digested food.
 - 5. Custards will admit of many flavorings and variations.

Lesson XXXVIII

Additional Recipes

EGGS DROPPED ON TOAST

Prepare squares or circles of toast. Dip quickly into boiling water to which has been added $\frac{1}{2}$ tp salt for each cup of water, and spread with softened butter. Arrange on a platter. On each, break carefully a soft-boiled egg, keeping the yolk whole and on the center of the toast. Garnish with parsley and serve.

CUSTARD BREAD PUDDING

This may be made by pouring any of the given custard mixtures over buttered slices of toast. Bake in the oven according to the directions for Yellow Custard.

CHOCOLATE CUSTARD

$\frac{1}{2}$ size unsweetened chocolate	2 c milk
½ c sugar	3 eggs
3 tb water	½ tp sait
4 .4 .4.	

1 tb vanilla

Scald the milk, melt the chocolate, and cook it with half the sugar and all of the water until smooth and glossy. Add the scalded milk, stirring until well mixed. Beat the eggs slightly, add remainder of the sugar and the salt. Pour into it the chocolate mixture; 'strain into buttered molds. Bake as Yellow Custard.

FLOATING ISLAND

1 pt milk	1 tp vanilla
yolks of 3 eggs	$\frac{1}{4}$ tp salt
whites of 3 eggs	some currant or other
$\frac{1}{3}$ c sugar	highly colored jelly

Place the milk in a double boiler and scald. Beat the whites until stiff and dry and drop by tablespoonfuls upon the milk. Poach until done, or until they feel firm to the touch and no dent is made when touched with the fingers. Lift from the milk with a skimmer and drain on a platter. Beat the yolks, add the sugar and salt, and mix thoroughly. Mix a little of the hot milk with the yolk. When well blended, add slowly to the milk, stirring all the time. Stir until the spoon is coated with the custard; it is then done. Pour into a glass dish and place upon the custard the poached whites. Set aside to chill. When ready to serve, place little dots of jelly on each "island." Serve in little glass dishes. Pass cake or suitable wafers with this dessert.

STUFFED EGGS

Cut hard-boiled eggs in halves either lengthwise or crosswise. Remove yolks and mash them. Add half the amount of very finely minced ham and enough melted butter to make of the consistency to shape. Shape into balls and refill the whites. Form the remainder into a nest and place the eggs on the nest. Pour white sauce over the whole, sprinkle with buttered crumbs, and bake in a moderate oven till brown.

Eggs in a Nest

Separate the white of the egg from the yolk. Beat the white stiff and dry; put it in a cup or small bowl, making in the top of it a hollow the size of the yolk; into this hollow slip the yolk. Cook in a covered sauce pan containing boiling water until the top of the white is firm (about two minutes). Serve in the cup.

SCALLOPED EGGS

2 hard-boiled eggs ³/₄ c chopped cold meat

1 pt white sauce (thin) 3 c buttered cracker crumbs

Chop eggs finely. Sprinkle bottom of a buttered baking dish with crumbs; cover with one-half the eggs; cover the eggs with

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sauce; the sauce with meat; repeat. Cover with the remaining crumbs. Place in a moderate oven and bake until brown. Ham is the best meat to use, but chicken, veal, or fish may be used.

Eggs a la Goldenrod

3 hard-boiled eggs 1 tb flour $\frac{1}{2}$ tp salt 5 slices toast 1 tb butter 1 c milk $\frac{1}{8}$ tp pepper parsley

Make a thin white sauce with butter, flour, milk, and seasonings. Separate the yolks from the whites of boiled eggs. Chop whites finely, and add them to the sauce. Cut four slices of toast in halves lengthwise. Arrange on a platter, and pour over the sauce. Force the yolks through a potato ricer or strainer, then sprinkle over the top. Garnish with parsley and add remaining toast, cut in points.

Lesson XXXIX

Eggs (Reading)

In one of the first lessons it was told how food must supply the body with heat and energy, build up new and renew wasted tissues. To do this, the foods must contain heat and energygiving foods, such as starches, sugars, and fats, and tissuebuilding foods, and mineral matter from which to build up the bony part of the body.

Eggs have been used as food for man since the earliest time. Today a great many kinds of eggs are eaten all over the world. Along the Amazon river one finds turtle eggs being used for food a great deal by the natives; these were used for food in the United States in former times, but as they are more scarce now, their use has declined.

The eggs of some fish are highly prized as a table delicacy. An example of such is caviare, which is made from the eggs of the sturgeon and shad roe. The fishermen of Norway and Sweden

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greatly prize the eggs of the herring, which is abundant in the waters surrounding their peninsula.

Eggs of some wild birds are also esteemed for food. In England and Germany plover eggs are thus used; in this country the eggs of certain sea birds such as the gull, tern, and heron are gathered for food.

But among civilized people, the eggs most commonly used are those of the domestic fowls, such as ducks, geese, guinea fowls, turkeys, and hens. The eggs of the guinea hen have a very delicate flavor; turkey eggs are more valuable for setting, hence they are but rarely used for food. In South Africa, where ostrich raising is an important industry, their eggs are used to some extent for food, and are said to be of excellent quality for cooking. But the term "eggs," usually refers to the eggs of the hen.

All are familiar with the appearance of the egg as it comes from the market. Eggs of the different kinds of birds vary much in color, but those of the hen range only from pure white to a light or deep brown in tint.

There are five parts to a hen's egg; the shell, outer covering, the membrane lining the shell, the white, the membrane surrounding the yolk, and the yolk. The egg white is in a semifluid condition; the yolk is kept in its place within this fluid by means of two twisted cords of white. Within the yolk is a little mass which is called the embryo. This embryo is the living part of the egg; under the right conditions this embryo will develop in the course of three weeks into a tiny little chick. The yolk and the white of the egg are the materials which are used by the embryo as it grows; from them come all the tissues and organs of the little chick.

The tissues of the chick are composed of essentially the same materials as are the tissues of the human body. It has already been said that eggs are a tissue-building food. Tissue-building principles from different sources are slightly different in composition and are given different names. In eggs the principle

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is called albumen; the white of the egg is composed chiefly of albumen and water, and albumen is also present in the yolk. The name comes from a Latin word, "albus," meaning white. There is so much water present with the albumen that an egg is more than half water. The yolk contains in addition to the albumen and water, large amounts of a fatty substance, or oil, and mineral matter.

The egg contains neither starch nor sugar. What foods, therefore, should be served with egg to supply this lack?

Eggs are now used in every family to a large extent. They are used directly in the dietary in the form of boiled, poached, or scrambled eggs, as well as in a number of other forms. are also used indirectly in making other foods light, as in cake, or for giving richness, as in sauces. Because they are thus extensively used, it is necessary to know how to choose fresh Here are four rules which may be of some assistance: The shell of a fresh egg is rough and dull-looking, that of a stale egg is smooth and shiny. Candling is another method of detecting spoiled eggs. Hold the egg up in front of a candle or other strong light in a dark room. If fresh, the contents of the egg should appear clear; if stale, they will appear cloudy or dark colored. A third method of testing is by dropping them into a pan of cold water. Perfectly fresh eggs will sink. egg which rests on its side is fresher than one which stands on end. If the egg floats, it is stale, and probably not fit to use. The reason for this is that as the water evaporates the egg becomes lighter. If enough water has evaporated to make the egg lighter than the water upon which it rests, it must be rather Another method is to hold the egg up to the ear and shake it; if it rattles, it is not fresh.

BATTERS

Lesson XL

Pop-overs

Materials used:

Class Rule		Home Rule	
½ c sugar	pinch of salt	1 c flour	$\frac{1}{2}$ tp melted
$\frac{1}{8}$ c milk	$\frac{1}{16}$ tp melted	$\frac{7}{8}$ c milk	butter
½ egg	butter	2 eggs	½ tp salt

Utensils needed:

2 bowls sieve

2 measuring cups



spoons knife iron gem pan omelet pan

Dover egg beater Fig. 49.—Gem Pan

Things to be done:

- 1. Put oven over fire.
- 2. Sift the flour before measuring.
- 3. Measure flour and salt and sift them together.
- 4. Add the milk gradually to the flour, beating constantly to make a smooth batter.

(Beat by cutting down with the spoon from top to bottom and bringing the spoon up again with a rapid motion, thus turning the mixture.)

- 5. Beat the egg well with the Dover egg beater.
- 6. Melt the butter in the omelet pan.
- 7. Add the beaten egg and butter to the smooth batter.
- 8. Beat two minutes with the Dover egg beater.
- 9. Butter the gem-pan by brushing it with melted butter or rubbing the butter on with a piece of paper, and heat it till hot.
 - 10. Pour batter into the hot, buttered gem-pan.
 - 11. Bake about thirty-five minutes in a hot oven.

Principles:

- 1. Flour which is a starchy substance, when mixed with a liquid—milk in this case—in the right proportions, forms a mixture which can be beaten, and is called a batter.
- 2. Adding the egg and butter makes the batter more tender, so the egg and butter are shortening agents.
- 3. The liquid which is in the batter is turned to steam by the great heat of the oven, and as the steam tries to escape, it pushes the batter up, making it rise and become full of bubbles. In this case the steam is called the leavening agent, because it makes the pop-over light.
- 4. The heat of the oven hardens the batter and keeps it from falling together after the steam has escaped.
- 5. This batter is so thin that it can be poured from the bowl in which it was mixed into the hot gem pan; therefore it is a pour batter.
- 6. When butter is used for greasing tinspit should be melted so that the salt may settle.

Table manners:

Rule: One should not lean against the back of the chair, but sit erect.

The liability of dropping one's food in carrying it from the plate to the mouth is increased by leaning back while eating. Neither should one lean on the elbows on the table, but sit easily erect. Cleaning up:

- 1. Flour contains a tissue-building substance, called gluten, which is very sticky when it comes in contact with a liquid. If hot water is poured on the batter, it will cook it and make it harder and more difficult to remove. Therefore, batter dishes should always be soaked in cold or only lukewarm water.
- 2. Rinse off the egg beater as soon as it has been used, for if the egg hardens on it, it is very hard to wash off.

What has been learned:

1. A batter is a mixture of a starchy, dry ingredient with a liquid in such proportion that the mixture can be beaten.

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- 2. A pour batter is a batter thin enough to be poured.
- 3. Shortening agents, fats and eggs, make a batter tender.
- 4. Heat causes the moisture to expand into steam and makes the batter light.
- 5. The ingredient which makes a batter light is a leavening agent.
- 6. The heat of the oven hardens the walls of the bubbles caused by the steam, and keeps the pop-overs from falling.
 - 7. The tissue-building material in flour is called gluten.
 - 8. Soak batter dishes in cold or luke warm water.
- 9. Butter which is to be used for greasing tins should be melted.

Lesson XLI

BREAD GRIDDLE CAKES

Materials used:

Class Rul	Home Rule
6 tb stale bread crumbs	$1\frac{1}{2}$ c stale bread crumbs
6 tb scalded milk	$1\frac{1}{2}$ c scalded milk
½ tb butter	2 tb butter
½ tp baking powder	4 tb baking powder
½ egg	2 eggs
1 tb flour	½ c flour
$\frac{1}{16}$ tp salt	$\frac{1}{2}$ tp salt
small piece beef suet or fat	beef suet or fat pork
pork	

Utensils needed:

Omelet pan or griddle	sieve
small bowl	spoons
large bowl	knife or pancake turner
measuring cup	fork

Dover egg beater

Work to be done:

1. If the crumbs are not already prepared, prepare them as directed in Lesson IX.

- 2. Add milk and butter to the crumbs and let them soak till the crumbs are soft.
 - 3. Beat the egg.
- 4. Sift the flour, salt, and baking powder together.
- 5. Add $\frac{1}{4}$ egg to the softened bread crumbs.
- 6. Add sifted dry ingredients to crumbs.
 - 7. Beat mixture well.
- 8. Put omelet pan or griddle over the fire.
- 9. Rub pan or griddle with beef suet or fat pork on end of fork covered with clean cheese cloth.



Fig. 50.—Greasing the Griddle

- 10. When the pan is smoking hot, pour a little on it from the tip of the stirring spoon.
 - 11. When the batter is cooked on the edges and puffed full



Fig. 51.—Turning the Cake

of bubbles, turn it with the case knife or turner and cook it on the other side.

(Never turn a cake twice, or it will become heavy.)

12. Place the cake on a warm plate, rub away any batter that remains, and grease the pan again, being sure to grease the whole surface.

13. Beat the batter well and put more in the pan to cook, continuing until all the batter is cooked.

Principles:

- 1. A pour batter can be cooked by applying heat to one side at a time, as in sautéeing.
- 2. Sautéeing on a greased surface keeps the batter from sticking and changes the flavor of the cake. It also adds somewhat to the food value, as the fat is a heat and energy-giving food.
- 3. The bread crumbs are used in place of part of the flour of simple griddle cakes.
- 4. Baking powder is made up of two dry substances which have the property of giving off a gas when moistened. When



Fig. 52.—Cakes Served

the moistened bread crumbs come in contact with the baking powder, the gas formed tries to escape through the batter and thus makes bubbles, just as escaping steam does, and that makes the batter light. Thus bak-

ing powder is the leavening agent of this kind of griddle cakes. Serving:

Griddle cakes should be served for breakfast. Butter, butter and sugar, or butter and syrup are usually served with them. Griddle cakes are best served hot from the griddle. If this is not practicable, they may be placed on a warm plate and a cover which has a hole in the top so that the steam may escape placed over them so they will not become soggy.

A very delicious dressing for griddle cakes is made by buttering in the kitchen, while very hot, sprinkling powdered maple sugar on top, and serving at once.

If griddle cakes are as light as they should be, they may be cut with the side of the fork and eaten with the fork.

Table manners:

Rule: Never leave a spoon standing in a cup. After using to stir the sugar or to sip, remove from the cup and place in the saucer. If no saucer is used, lay the spoon on the side of the plate.

Serving guests:

Chairs should be placed at the table so that the front edge of each chair touches or is just below the edge of the table cloth. The chair should not be moved nearer the table after one is seated. Cleaning up:

Because the omelet pan is very greasy, it must be washed in hot soapy water.

All dishes must be carefully rinsed in hot water.

What has been learned:

- 1. To use the pour batter in making griddle cakes.
- 2. To use bread crumbs in place of part of the flour.
- 3. To cook a pour batter on a very hot greased surface.
- 4. That baking powder is a leavening agent.
- 5. That griddle cakes should be served while hot.

Lesson XLII

Sour Milk Griddle Cakes (with Lemon Syrup)

Materials used:

Class Rule

‡ c flour	$1 ext{ tb } egg$	2 c flour	1 egg
$\frac{1}{8}$ tp soda	$\frac{1}{16}$ tp salt	1 tp soda	$\frac{1}{2}$ tp salt
½ c sour milk		2 c sour milk	
	Lemon	Syrup	
2 tb sugar	a few drops of	1 c sugar	1 tb lemon
2 tp water	lemon juice	$\frac{1}{4}$ c water	juice
½ tp butter		1 tp butter	
Utensils neede	d:		
Sauce pan	small bowl	knif	e
omelet pan	sieve	spo	ons
large bowl	measuring	cup Doy	ver egg beater



Home Rule

Work to be done:

- 1. Sift the flour, then measure and sift all the dry ingredients together.
 - 2. Beat the egg.
- 3. Add the egg and milk to the dry mixture, stirring constantly to make a smooth batter.
- 4. Put the sugar and water for the syrup into the saucepan and boil five minutes.
- 5. Remove the saucepan from the fire and stir in the lemon juice and the butter.
 - 6. Prepare omelet pan as in Lesson XLI.
 - 7. Cook cakes as in Lesson XLI.

Principles:

Sour milk contains an acid; when soda comes in contact with this acid, a gas is formed. In trying to escape, the gas makes the batter light, just as did the gas formed by the coming in contact of baking powder and moisture. Therefore, soda with sour milk is also a leavening agent.

Serving:

Serve the cakes hot. Place the syrup in a small pitcher and serve hot.

Griddle cakes are a breakfast dish, although some also serve them for supper in cold weather.

Cleaning up:

- 1. Scald all dishes which have had sour milk in them.
- 2. Wash all dishes as before directed.

What has been learned:

- 1. Sour milk contains an acid.
- 2. Soda is a leavening agent.

Supplementary Recipes

WHEAT GRIDDLE CAKES

Materials used:

Class Rule		Home Rule	
1 c sweet milk .	🚦 tb butter	🖁 c sweet milk	1 tp salt
1 egg (for 3 girls)	$\frac{1}{16}$ tp salt	1 egg, separated	1 c flour
separated	🚦 c flour	1 tp butter, melted	



Work to be done:

Put yolk of egg, salt, and 1 c milk in a bowl, add 1 c of flour and stir till smooth, beating if necessary. Add milk and flour alternately till both are all used. Beat in the butter and lastly fold in the beaten white of the egg.

WHOLE WHEAT OR GRAHAM FLOUR GRIDDLE CAKES

Make same as wheat griddle cakes, except use one teaspoonful of sugar to each cup of flour.

CORN GRIDDLE CAKES

Class Rule

ł c corn meal	ł c milk	† tp salt
1 c boiling water	1 tp baking powder	1 tp egg (well beaten)
‡ tb flour	tp sugar	

Work to be done:

Pour the boiling water on the cornmeal and other dry ingredients. except the baking powder and flour, stir and let cool, then stir in the egg, and add milk, flour, and baking powder.

Lesson XLIII

GRAHAM MUFFINS

Materials used:

Class Rule		Home Rule	
$\frac{1}{8}$ c Graham flour	½ egg	1 c Graham flour	1 egg
$\frac{1}{8}$ c white flour	$\frac{1}{8}$ tb butter	1 c white flour	1 tb melted
$\frac{1}{2}$ tb sugar	$\frac{1}{2}$ tp baking	½ o sugar	butter
½ tp salt	powder	1 tp salt	4 tp baking
2 tb milk		1 c milk	\mathbf{powder}

utensus needed:		
2 bowls	tablespoon	Dover egg beater
flour sifter	teaspoon	gem pan
case knife	measuring cup	

Work to be done:

- 1. Put the oven over the fire to heat.
- 2. Sift the white flour. Measure it.
- 3. Measure the sugar, salt, and baking powder, and sift together with white flour.

- 4. Measure the Graham flour and add to the other dry ingredients.
- 5. Add the milk, beating thoroughly to make a smooth batter.
 - 6. Beat the egg in a bowl.
 - 7. Add the egg to the batter.
 - 8. Melt the butter and add to the mixture.
 - 9. Beat thoroughly.
 - 10. Heat and butter gem pan.
 - 11. Turn the mixture into the gem pan.
 - 12. Bake in a moderate oven about twenty-five minutes.

Principles:

Graham flour, though very nutritious, is too sticky to be used alone, hence it is combined with white flour. It is coarse because it has more of the outer layers of the wheat kernel. Because this coarseness gives Graham its peculiar value as a food, the flour should not be sifted, as this would remove all of the coarser particles.

The general proportion of a muffin batter is one part liquid to $1\frac{1}{2}$ parts flour. This makes a batter of such thickness that when poured from the spoon, it breaks. Such a batter is known as a drop batter.

Serving:

As soon as done, remove to a plate or fancy dish on which a folded or fringed napkin is placed. Muffins are properly served at breakfast or at luncheon. When eaten they are broken apart and buttered.

Table manners:

Rule: Never leave the table without asking to be excused.

This rule applies not only when guests are present, but in the privacy of one's family. This habit of showing courtesy at all times to one's intimates as well as to strangers is a mark of good breeding.

Cleaning up:

1. Put the gem pans to soak in cold water.

Scour pan with sapolio or cleanser to remove burnt spots and discolorations.

What has been learned:

- 1. Graham flour cannot be used alone, as it is too sticky.
- 2. A drop batter is one of such thickness that when poured from a spoon, it breaks.

Additional Recipes

1 c flour 1 egg 1 tb melted butter 1 c sweet milk 2 tb sugar 1 tp salt

4 tp baking powder

Sour-Milk Muffins

 $1\frac{1}{3}$ c sour milk $\frac{3}{4}$ tp soda $\frac{1}{2}$ tp salt2 c flour1 tb melted butter2 tb sugar

Sour-Milk Graham Muffins

1½ c white flour 2 tp soda 1 tb melted butter 1 c Graham flour 2 tb sugar ½ tp salt

11 c sour milk

Lesson XLIV

CORN MEAL GEMS

Materials used:

Class Rule Home Rule 1 tb corn meal 🕯 c corn meal 2 th flour 1 c flour 3 tp baking powder 2 tp baking powder ½ tb sugar 1 tb sugar 1 tb melted butter 1 tb melted butter 15 tp salt to salt 1½ tb milk 3 c milk ł egg $1 \, egg$

Utensils needed:

 $egin{array}{lll} 3 & bowls & tablespoon & teaspoon \\ sifter & gem & pan & case & knife \\ \end{array}$

egg beater

Work to be done:

- 1. Scald the milk.
- 2. Add the butter and salt.
- 3. Stir in the corn meal; let thicken a few moments; then cool.
- 4. Beat the eggs without separating.
- 5. Add the eggs to the mixture.
- 6. Sift flour, sugar, and baking powder together, and add to the batter.
 - 7. Turn into a hot, buttered gem pan.
 - 8. Bake in a hot oven about twenty minutes.

Principles:

Corn meal is too crumbly to be used alone. Corn in drying loses so much water by evaporation that it becomes hard and flinty. By scalding the corn meal, the starch cells are broken so that they absorb the liquid, causing them to swell. Thus the starch cells are prepared to be acted upon by the digestive juice.

Serving:

Corn meal gems are served the same as muffins.

Table manners:

RULE: If not certain just how a given dish is to be eaten, glance at the hostess, and do the same as she does.

Cleaning up:

1. Soak the dish in which corn meal was scalded with cold water. Why?

What has been learned:

- 1. Corn meal cannot be used alone because it is too crumbly.
- 2. Corn meal should be scalded in order to break the starch cells.

Additional Recipes

GOLDEN CORN CAKE

½ c corn meal ½ c sugar 1½ c flour 2½ tp baking powder		½ tp salt 1 c milk	1 egg 1½ tb melted fat
	Rich Corn	Cake	
1 c corn meal	4 tp baking powder	½ tp salt	2 eggs
1 c white flour	1 c sugar	7 c milk	1 c melted butter

Lesson XLV

TWIN MOUNTAIN MUFFINS

Materials used:

Class Rule		Home Rule	
2 tp sugar	🔒 c flour	½ c sugar	2 c flour
2 tp butter	½ tp baking	½ c butter	3 tp baking
¹ / ₆ egg	\mathbf{powder}	1 egg	\mathbf{powder}
2 tb milk		🤰 c milk	

Utensils needed:

3 bowls	tablespoon	egg beater
wooden spoon	wire whisk	measuring cup
with slits	sifter	gem pan
1		

teaspoon

Work to be done:

- 1. Sift the flour.
- 2. Measure out all the dry ingredients, mix, and sift together.
- 3. Break the egg. Separate the white and yolk.
- 4. Measure out butter into an earthen bowl.



Fig. 53.—Creaming Butter

- 5. Work butter with a wooden spoon until it is soft and creamy.
 - 6. Add sugar and cream butter and sugar together.
 - 7. Beat the yolk until thick and light colored.
 - 8. Add it to the butter and sugar and mix thoroughly.
- 9. Measure out the milk in the bowl in which the yolks were beaten. Add a little of the milk to the above mixture, then a little of the flour, and continue until all the milk and flour have been incorporated into the batter.
 - 10. Beat the mixture thoroughly.
 - 11. Beat the whites of the egg with a wire whisk.
 - 12. Fold it carefully into the mixture, by cutting down to

the bottom of the dish with the spoon, bringing it to the top and folding over the mixture thus brought to the top.

- 13. Grease gem pan and sprinkle with flour.
- 14. Pour in batter and bake in a moderate oven for about twenty minutes, or until they are a beautiful golden brown.

Principles:

Before the other ingredients are added, the butter and sugar must be creamed until they become of a semi-liquid consistency in order to make the muffins fine-grained and light. For the same reason, all the ingredients except the egg white must be thoroughly beaten.

In this muffin, two leavening agents are used: (1) The gas formed by the addition of liquid to the baking powder; (2) the

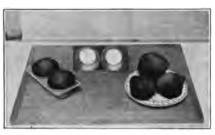


Fig. 54.— Muffins

air which is incorporated into the beaten egg white. Why then should the egg white be folded in?

Sprinkling the greased pan with flour gives a glazed surface to the muffin.

Twin Mountain Muffins may be served for

luncheon or for breakfast. They may take the place of cake; they are, in fact, a sort of small cake.

Table manners:

RULE: Only the tips of the fingers, one hand at a time, should be dipped in the finger bowl.

What has been learned:

- 1. A thorough creaming of butter insures fine grain in muffins.
- 2. The batter must be thoroughly beaten to insure lightness and fine grain.
- 3. Less baking powder should be added when whites of eggs are used.
 - 4. Greasing and flouring tins gives a glazed surface.

CAKES

Lesson XLVI

PLAIN CAKE

Materials used:

Class Rule Home Rule 1 to butter 🕯 c butter ½ to baking powder 를 c milk 1 tb sugar 🕯 c sugar 1½ c flour 2½ tb flour 1 or 2 eggs 1 tp egg 3 drops of flavoring ½ tp flavoring 1 tp baking powder 1 tb milk pinch of salt tp salt

Utensils needed:

Large bowl small bowl Fig. 55.—Cake Rack cake tin cake rack wooden spoon sieve measuring cup

Work to be done:

- 1. Put oven on to heat.
- 2. Cream the butter as directed in Lesson XLV.
- 3. Add the sugar gradually and cream it with the butter till the sugar has dissolved.
 - 4. Beat the egg.
- 5. Add the beaten egg to the creamed sugar and stir vigorously.
 - 6. Sift all dry ingredients.
- 7. Add the dry ingredients alternately with the milk, stirring constantly.
- 8. Grease the tin well by brushing it with soft lard or melted butter.

- 9. Fill the tin about two-thirds full of the batter, drawing the mixture away from the center toward the corners or edges of the tin
- 10. To test the oven, place a piece of white paper in it. If this paper turns a rich brown in five minutes, the oven is right for the cake.
 - 11. Place cake on the bottom grate of the oven.
- 12. When the cake has risen and bubbles and brown spots. begin to appear, very carefully move it to the upper grate.



Cake Out of Tin

Fig. 56 Testing with Straw

Batter in Tin

- 13. When the cake has browned all over the top, and has shrunk from the sides of the pan and settled, and no batter sticks to a straw pushed into it, carefully remove it from the oven. At this stage it should spring back when touched lightly with the finger.
- 14. As soon as the cake is taken from the oven invert the tin.
- 15. If the cake sticks, lay a damp cloth on the bottom of the inverted tin.
 - 16. Place cake on a rack and let air circulate around it.

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Principles:

1. The method of mixing the ingredients, which is called the butter-cake method, gives a fine grained texture to the cake.

- 2. Because a leavening agent, in this case baking powder, is used, a gas will be given off, which will make the cake rise. So in order that the cake shall not run over the top of the tin, the tin should be filled only about two-thirds full.
- 3. The batter which is in contact with the tin is exposed to the greatest heat, therefore it cooks more quickly than that in the center, and the center, or middle part, has a chance to rise more. Hence, the batter at the beginning should be drawn away from the center toward the edges of the tin in order that the cake may be even on the top when done.
- 4. Because the cake is made with a thin batter, it needs a very hot oven, or it will run over.
- 5. The cake is placed on the bottom grate first that the bottom may start to bake and that the top crust may not be formed before the batter has become light.
- 6. The cake is raised to the top of the oven so that the top may be baked and browned and the batter may not run over. Serving:
- 1. Cakes are a composite food, that is, they contain both tissue-building and heat and energy-giving materials, and so they are a good food if properly served. They should be one of the important parts of a meal and not be served merely because of their pleasant flavor.
- 2. This cake may be served at luncheon or at a simple dinner with coffee, cooked or fresh fruit, and frozen dessert.

Table service:

Any hot beverage must be placed at the right of each guest. The handles of the cups should be at right angles to the edge of the table.

Cleaning up:

1. Like other batter dishes, cake dishes should be soaked in cold or luke-warm water before being washed.

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What has been learned:

- 1. How to mix ingredients by the butter-cake method.
- 2. Much creaming and beating make cakes fine grained.
- 3. That cake tins should be only about two-thirds full of batter.
- 4. That batter should be drawn toward the outside away from the center of cake tins.
 - 5. How to test the oven for baking butter cake.
- 6. That cake should first be placed on the bottom grate of the oven.
- 7. That cake should be moved carefully when raising it to top grate.
 - 8. How to test when cake is done.
 - 9. How to remove cake from tin.
 - 10. How to care for freshly baked cake.

Supplementary Recipes

DEVIL'S FOOD

Materials used:

Class Rule		Home Rule	
🚦 tb butter	½ tp baking	1 c butter	4 tp baking
3½ tb sugar	powder	2 c sugar	powder
½ egg yolk	½ egg white	4 egg yolks	4 egg whites
1½ tb milk	🕯 square of	1 c milk	2 squares of
4 tb flour	chocolate	$2\frac{1}{2}$ c flour	chocolate

Use butter-cake method of combining; melt the chocolate in a cup over hot water before using it and add it to the batter just before the beaten egg whites. The whites should be folded in the last thing, only the beaten yolks being mixed with the creamed butter and sugar.

ONE EGG CAKE

Materials used:

	-		
Class Rule			Home Rule
🖁 tb butter	1½ tb milk	🕯 c butter	½ c milk
1½ tb sugar	4 tb flour	½ c sugar	1½ c flour
of one egg	1 tp baking powder	1 egg	21 tp baking powder
Combine by I	butter-cake method.		

Lesson XLVII

PLAIN BOILED FROSTING (without Egg)

Materials used:

Class Rule		Home Rule	
½ c sugar 2 tb water	flavoring	$\frac{1}{2}$ c water	flavoring

Utensils needed:

Saucepan measuring cup knife spoons large bowl Work to be done:

- 1. Put sugar and water into a saucepan.
- 2. Put saucepan over fire and boil without stirring till the syrup forms hairs when it is dropped from the spoon into the saucepan, or till the syrup forms a soft ball when dropped into cold water.
 - 3. Remove saucepan from stove and let the syrup cool till

it does not stick to the finger if touched.

4. Add a few drops of flavoring and beat the syrup until it is of the right consistency to spread.

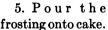




Fig. 57.—Testing the Frosting

- 6. Spread the frosting carefully, evenly, and quickly over the cake with a knife.
- 7. If the frosting hardens while being beaten, melt it again by setting the saucepan into a bowl of hot water and stirring. **Principles:**
- 1. The syrup should not be stirred while cooking or it will be grained. In stirring, some of the syrup is splashed up onto

the sides of the pan, where it becomes hard. If one of these little hard particles of sugar gets into the syrup, the whole mass will become grainy.

Cleaning up:

What kind of water should be used for cleaning sugary dishes?

What has been learned:

- 1. Syrup for frosting should not be stirred while boiling.
- 2. Stirring syrup makes it grainy.
- 3. Frosting on cake should be spread quickly.

Lesson XLVIII

WHITE MOUNTAIN CREAM

Materials used:

Class Rule	Home Rule
4 tb sugar	1 c sugar
$1\frac{1}{2}$ tb boiling water	½ c boiling water
1 egg white	1 egg white
tp vanilla	1 tp vanilla
a few drops of lemon juice	½ tb lemon juice

Utensils needed:

Saucepan	knife	egg whip
spoons	measuring cup	large plate or platter

Work to be done:

- 1. Put sugar and water into saucepan and boil as in Lesson XLVII.
- 2. Put egg white on plate or platter and beat it stiff with with the egg whip.
- 3. When the syrup hairs or forms a soft ball in cold water, remove it from the fire and pour it in a thin stream onto the beaten egg white, beating all the time until the frosting becomes the right consistency.
 - 4. Add the flavoring and pour frosting over cake.

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Principles:

The beating of the egg makes it light and fluffy; when the cooked syrup is poured onto the egg, the egg is cooked, and

the syrup makes the whole mixture harden when it becomes cold.

Egg white contains a great deal of tissue-building material, as has already been learned. The combining of the egg white and the sugar makes a very rich mixture, which adds much to the food value of the cake upon which it is spread.

Cleaning up:

Should the dish used for the egg be soaked in the same kind of water that is used for the syrup pan?



Fig. 58.—Pouring Syrup onto Egg White

What has been learned:

- 1. Tissue-building, and heat and energy-giving foods are combined in making frosting.
- 2. The hot syrup cooks the egg white and makes the frosting hard.

Additional Recipes

COLD CREAM FROSTING

Moisten powdered sugar and sweet cream, melt over hot water, and spread on cake.

UNCOOKED FROSTING WITH EGG WHITE

White of egg

½ tp vanilla

2 tp cold water ³/₄ c powdered sugar

Beat the egg white till stiff, add water and sugar gradually, beat thoroughly, add flavoring, and spread on cake.

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YELLOW FROSTING (Boiled)

1 c sugar 1 egg yolk ½ c water

Boil the sugar and water till it hairs or forms a soft ball in cold water. Add the syrup gradually to the beaten egg yolk; beat till of the right consistency for spreading.

The whole egg may be used with 2 c sugar.

SIMPLE UNCOOKED FROSTING

Stir together equal parts of unbeaten egg whites and water; stir stiff with powdered sugar, flavor, and spread on the cake.

Lesson XLIX

Batters (Reading)

In the southern states griddle cakes are always spoken of as "batter cakes." In Pennsylvania and much of that region they are called "hot cakes," while the old Yankee term for them is "pancakes." What boy has not been coaxed out of bed on a cold winter morning with the alluring announcement, "There are buckwheat cakes and maple syrup for breakfast," and what girl has not joined her brother in the stowing away of at least a half dozen delicately browned "buckwheats" before racing off to school? While much is said about the unhealthiness of buckwheat cakes and of batter cakes generally they are usually easily digested by the boy or girl who runs out to play or walk after eating them.

Many old-fashioned cooks still maintain that really good batters cannot be made without a great many eggs. But the high prices of eggs have made many a cook resort to substitutes when making cake and other batters. Baking powder is the most popular substitute, and a very light batter can be made with it, but it will not supply the flavor, richness or color that eggs will supply. Bakers often use a material called "egg color" which gives the yellow color produced by eggs and also some slight element of the same flavor, but it adds little or nothing to the richness of the batter and the uninitiated

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are led by it to wonder how a cake can be so yellow and at the same time so tasteless.

Bakers also use desiccated eggs to a very great extent. These are better than the "egg color" and really impart the substance of the egg which has been dried and reduced to a powder. If made by a reliable firm using none but fresh eggs, the desiccated form is of genuine value and much cheaper than new-laid eggs.

The art of making a good batter lies largely in the beating, which should be done in such a manner that the air will be beaten into the substance.

For Review

DEFINITION OF BATTERS

A batter, which really means something battered or beaten, as used in cooking means a mixture of some starchy substance, such as flour or meal, and some liquid, such as water, milk, or molasses, in such proportions that the mixture can be beaten.

A batter may be either thin or thick.

A pour batter, the thinnest batter we have, is one that can be poured from a dish without breaking.

A drop batter is one that breaks when poured from a dish, but is not thick enough to handle.

TABLE OF PROPORTIONS OF INGREDIENTS

Pour batter—1 c liquid to 1 c dry matter.

Drop batter—1 c liquid to 2 c dry matter.

Modification of Batters

The liquid and flour or meal are often combined with other ingredients, called leavening agents, shortening and flavoring. Leavening agents, air, steam and gas, are added to make the batter light and porous so that it is more easily digested. Short-

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ening agents, eggs, butter, lard, meat drippings, etc., are added to make the mixture tender. For flavor, seasonings, eggs, spices, salt, and extracts are added. To get different textures, different methods of combining the ingredients are used. The difference in the kind of liquid and the grades and kinds of meal or flour also make a difference in the batter.

METHODS OF COMBINING INGREDIENTS

1. Batter method:

Mix and sift all dry ingredients. Mix egg and milk, if egg is used, having egg beaten together first, and add the liquid gradually to the flour, stirring constantly, but add liquid fast enough so that the batter will not become too stiff in the center. Add the melted shortening last.

2. Butter cake method:

Cream the shortening, but do not heat it, by mixing it with a wooden spoon, until it is soft and creamy. Then add the sugar gradually and beat thoroughly till there results a smooth, creamy mixture and the sugar is dissolved. If eggs are to be added whole, beat them and put them in next. If they are to be separated, beat the yolks and add them now. Then add the flour and milk alternately, reserving the baking powder for the last of the flour. Add salt and flavoring, and if whites have been separated, cut and fold them in, after stiffly beating. General rules:

All batters should be salted.

Always have all ingredients and utensils ready before starting to make anything.

Griddle cakes:

For griddle cakes, an iron griddle is preferable unless no grease is desired; aluminum and soapstone griddles need no greasing. For greasing a griddle, pork fat or beef suet is preferable, as they do not burn readily or soak into the cakes. When a cake is put on the griddle, if large bubbles begin to rise at once to the upper side of the cake, the griddle is too hot;

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if the upper side of the cake begins to stiffen before the under side is browned, the griddle is not hot enough.

Leavening of batters:

In making omelet, what is done to make it puffy and light? How are the yolks and water added to the whites? What leavening agent is used in making omelet?

When water is heated it will expand, or spread out, into several times its volume, forming steam. Use is made of this in the leavening of batter for certain things. What made the pop-over light? What, then, was the leavening agent used for pop-overs? What leavening agent was used in the bread griddle cakes? What other substance is used to form a gas which acts as a leavening agent? What is always used as a leavening agent when sour milk is used? Why? What are four leavening agents that have been used in the lessons so far? Materials for cakes:

For cakes only the very best of materials should be used; the best flour, fresh eggs, fresh butter, fresh fruits and good flavoring. Pastry flour, which contains more starch than bread flour, is best suited for cake making; when bread flour is used instead of pastry flour, the amount of flour should be diminished 2 tb for each cup.

All spices should be sifted with the flour; coarse granulated sugar makes a coarse grained cake; powdered sugar makes dry, solid cake; hence fine granulated sugar is better suited for cake making.

Baking of cake:

When cake is put into the oven, if it rises too fast or contains too much flour, it will crack. Cake which has too much baking powder in it, or is not beaten enough, or is baked in too hot an oven, is coarse in texture. There are four periods for the baking of cake:

- 1. Cake rises.
- 2. Small bubbles appear and cake browns in spots.
- 3. Cake browns all over.



4. Cake shrinks from sides of the pan and settles.

If a cake is to be moved, this should be done in the first or early part of the second period. After a cake has risen enough. but before the cell walls have been cooked enough to make them solid, a slight jar will break down the cell walls and make the cake fall. This is because there is no more gas to make more cells, or bubbles.

Shortening:

What is shortening? What is its use in batter? The substances which are supposed to have the greatest shortening property are lard and cottolene. They are less expensive than butter, but have not so good a flavor. Butter is expensive. but its good flavor makes it very desirable. Because butter is not pure fat, but contains water and some milk, very often recipes calling for butter to be used as the shortening also call for a little soda. The milk that is in the butter is sour, and so contains acid; the soda will overcome the acid of the milk. Sometimes butter becomes slightly rancid; in which case it may be made usable for some purposes by heating it with water, then chilling it and removing the cake of fat which is formed. If further treatment is necessary, the fat may be heated with charcoal. Meat drippings may be treated in the same way. Shortenings with strong flavors may be used in spice-cakes, fruit cakes, and molasses cakes, where their flavor will not be noticeable.

Flavoring used in cakes:

Among the most common flavorings are the extracts which are used in cakes and candy. These extracts, lemon, vanilla, orange, peach, rose and almond are made from the flower, fruit or seed from which they get their name. Some other extracts, such as banana and strawberry, are made from chemicals.

Besides these extracts, fruit juices, such as lemon juice and orange juice, are often used for flavoring. But perhaps the first flavorings used were the spices. It is true that all these flavorings have no real food value, but because they are so pleasing to the taste they stimulate digestion, and so are important in the diet. The spices are all plant products, the most common of which are ginger, all-spice, clove, cinnamon, and nutmeg.

Ginger is usually sold in a powdered form, but it is really the root of a plant.

All-spice, so called, because it tastes like a mixture of all the other spices, is the cheapest of all the spices.

Cloves, used either whole or ground (ground in cakes), are

the partly opened bud of a plant.

Cinnamon is the bark of a tree. It may be used in long stick-like form.

The nutmeg is the nut of a peach-like tree. The outer pulp is not used.

Almost all of the spices



Fig. 59.—A Bundle of Cinnamon

are imported from countries having a tropical climate.

Lesson L

Drop Biscuit

Materials used:

Class Rule	Home Rule
½ c flour	2 c flour
1 tp baking powder	4 tp baking powder
½ tb fat	2 tb fat
7 tb milk	1¾ c milk

Utensils needed:

2 bowls	2 case knives	biscuit cutter
sieve	2 measuring cups	molding board
spoons	rolling pin	baking tins

Work to be done:

- 1. Put the oven on to heat.
- 2. Sift all dry ingredients.
- 3. Put fat, or shortening, into measured dry ingredients.
- 4. With two case knives, cut the fat into the dry mixture till the whole mixture is of a mealy consistency.



Fig. 60.—Dropping Biscuit Dough onto Tin

- 5. Add the milk slowly, cutting the mass instead of stirring it.
- 6. Sift a little flour onto the baking tin, then shake off all that does not stick.
- 7. Drop the biscuit mixture from the end of a knife in small piles onto the floured tin.
- 8. Place the pan on the bottom grate in a hot oven.
- 9. When the biscuits have risen and browned

slightly on the bottom, raise them to the top grate that they may harden on top.

10. When well browned remove from oven.

Principles:

- 1. This mixture is thicker than a batter, and is known as a soft dough.
- 2. The shortening is added by cutting it in with a knife, because all the ingredients of dough should be kept as cold as possible in order that the biscuit may be tender and the dough be less sticky, and so easier to handle. If the shortening were kneaded in with the hands the mixture would be warmer.
- 3. The baking powder acts the same here as it did with the batter. What is its use?

Serving:

- 1. Serve the biscuit while hot.
- 2. Serve the biscuit with butter at breakfast, luncheon, or dinner.
 - 3. Serve with stew at dinner.

Table manners:

Rule: Biscuit should be broken apart, not cut.

Cleaning up:

- 1. What kind of water should be used for rinsing batter dishes? Should dough dishes be treated the same or not? Why? What has been learned:
 - 1. To cut shortening into dry ingredients.
 - 2. That a soft dough is a mixture thicker than a batter.
 - 3. To keep all ingredients for biscuit cold.

Lesson LI

BAKING POWDER BISCUIT

Materials used:

Class Rule		Home Rule	
$\frac{1}{2}$ c flour	$\frac{1}{2}$ tb lard	2 c flour	2 tb lard
1 tp baking	$\frac{1}{4}$ tp salt	4 tp baking	$\frac{3}{4}$ tp salt
powder	a little milk	\mathbf{powder}	a little milk

Utensils needed:

Bowls	spoons	measuring cup	molding board
sieve	2 knives	biscuit cutter	baking tin

Work to be done:

- 1. Put on oven to heat.
- 2. Sift all dry ingredients.
- 3. Cut in the fat as directed for drop biscuit.
- 4. Add just enough milk to make the dough the right consistency to handle.
 - 5. Sift a little flour onto the molding board.
- 6. Turn the dough onto the floured board and work it quickly with the hands.





- 7. Pat the dough down to about one-half inch in thickness.
- 8. Dip the biscuit cutter into flour and then cut out the biscuit.
- 9. Place biscuit in floured pan and bake as directed for drop biscuit.

Principles:

- 1. This dough is still stiffer than the drop biscuit dough; it is stiff enough to be handled, but it should be touched as little as possible in order that it may be tender.
- 2. Biscuit should be baked at once before the baking powder has given off all its leavening power and the dough becomes solid.
- 3. There should be as little flour on the board as it is possible to have and still handle the dough.
- 4. Flour should not be left on the board and there should be none sticking to the outside of the biscuit, as it does not bake, besides making the baked biscuit very unattractive.

Serving:

Serve same as drop biscuit.

Cleaning up:

- 1. What utensils have been used for the first time?
- 2. Be sure to wash the molding board very carefully with soapy water, then rinse it thoroughly, and dry it.
- 3. Do not let any flour fall onto the floor and be sure that none is left about stove or desk.

What has been learned:

- 1. To knead biscuit dough as little as possible.
- 2. To use as little flour as possible on molding board.
- 3. Not to let flour stick to outside of biscuits.

Supplementary Recipes

SODA BISCUIT

Materials used:			
Class Rule		Home Rule	
d c sour milk	🕯 c flour	1 c sour milk	2 c flour
🔥 tp soda sifted	tp salt	tp soda with	½ tp salt
with 2 tb flour	tp baking	d c flour	3 tp baking
½ tp fat	powder	2 tp fat	powder

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Home Rule

CREAM SCONES

		CREAM	DUUL
Materials	nged:		

Class Rule
1 c flour 2 c flour

½ tp baking powder 4 tp baking powder

† tp baking powder † tp baking † tp sugar † tp salt † tp salt † tp salt † tb butter † tb butter † tegg † 2 eggs † tb cream † c cream

Mix and sift dry ingredients. Cut in butter, add eggs, well beaten, and cream. Toss on a floured board, pat and roll to $\frac{1}{4}$ inch thickness. Cut in squares, brush with egg white, sprinkle with sugar, and bake in a hot oven 15 minutes.

Lesson LII

FRUIT ROLLS

Materials used:

Class Rule Home Rule

 $\frac{1}{2}$ c flour 2 c flour

1 tp baking powder 4 tp baking-powder

 $\frac{1}{8}$ tp salt $\frac{1}{2}$ tp salt $\frac{1}{2}$ tb sugar 2 tb sugar

½ tb butter 2 tb butter 2 tb milk or water 4 c milk or water

 $\frac{1}{2}$ tb English currants or $\frac{1}{3}$ c English currants or

raisins raisins

Utensils needed:

Rolling pin spoons sieve

3 bowls knives molding board

2 measuring cups

Work to be done:

- 1. Put oven on to heat.
- 2. If raisins are to be used, put them in the strainer and set that into a large bowl containing warm water. Wash the raisins and then lift the strainer out of the bowl.
- 3. If currants are to be used, first dip them in flour, then wash them in warm water the same as the raisins.

- 4. Sift all dry ingredients, except the sugar, into the mixing bowl.
 - 5. Cut in shortening as for biscuit.
 - 6. Add the liquid the same as for baking powder biscuit.
- 7. Toss onto the floured mixing board, work quickly, only enough so that the dough can be rolled.
- 8. Roll till one-fourth of an inch thick, bearing down very lightly on the rolling pin.



Fig. 62.—Roll Making

- 9. Brush the rolled dough with melted butter.
- 10. Sprinkle dough with fruit and sugar, and roll it like a jelly cake.
- 11. Cut roll into pieces about three-fourths of an inch long and bake on a floured tin the same as biscuit.

Principles:

1. Biscuit dough may be combined with fruit and sugar to make a good substitute for cake or other sweet batters.

Serving:

Place fruit rolls on a china plate and serve hot at luncheon. They are eaten with or without butter.

What has been learned:

- 1. To roll biscuit dough.
- 2. To wash currants, raisins, or other dried fruit.

Lesson LIII

SHORTCAKE

Materials used:

Class RuleHome Rule $\frac{1}{2}$ c flour2 c flour1 tp baking powder4 tp baking powder $\frac{1}{2}$ tb sugar2 tb sugar $\frac{1}{6}$ tp salt $\frac{3}{4}$ tp salt1 tb shortening $\frac{1}{4}$ c shortening1 tb milk $\frac{3}{4}$ c milk

Utensils needed:

2 bowls baking tin knives spoons molding board sieve measuring cups

Work to be done:

- 1. Put oven on to heat.
- 2. Measure and sift all dry ingredients.

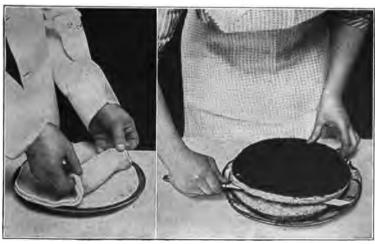


Fig. 63.—Placing Second Part on First

Fig. 64.—Separating Layers

- 3. Cut shortening into dry ingredients.
- 4. Add milk and cut it in.
- 5. Toss dough to floured board and work carefully.
- 6. Divide dough into two equal parts.
- 7. Shape one part to fit the floured shallow pan.



Fig. 65.—Part with Fruit on it

- 8. Brush the top of the dough in the pan with melted butter.
- 9. Shape second part of dough and place it on the first.
- 10. Bake in a hot oven twenty minutes like biscuit dough.
- 11. While the crust is baking, if fresh fruit is to

be used, wash it, crush it, and sweeten it. If cooked fruit is to be used, get it ready as necessary.

- 12. Take crust from oven when browned and baked.
- 13. Split cake, where two layers join, by breaking it apart carefully with a fork.
- 14. Put crushed sweetened or cooked fruit on the bottom part.
 - 15. Place top back on bottom.
 - 16. Place more fruit on top.
- 17. If desired, the dough may all be baked in one piece, then when the cake is split, the two parts should be buttered before fruit is placed on them.

Principles:

- 1. Shortcake dough is combined the same as biscuit dough and contains the same materials, but because it contains more shortening it is called shortcake.
- 2. Shortcake, because of the large amount of fat used in it, is a rather rich dish, and so should not be served with other rich foods.

- 3. Since shortcake dough must be handled a little, the ingredients should be kept as cold as possible, that the dough may be less sticky and so easier to handle.
- 4. Cutting the layers of cake apart makes the cake heavy, so they should be broken apart.
- 5. Buttering between the layers before baking them makes it easier to separate them when baked.
 - 6. Is short cake a composite dish?
 - 7. What value does the fruit add to the cake?

Serving:

1. Shortcake may be served either on individual plates or it may be cut and served at the table. In the latter case, the



Fig. 66.—The Finished Cake

Fig. 67.—Hostess Serving from Large Plate

whole cake should be removed from the baking tin and placed on a large plate or platter. The individual plates should be placed at the left of the hostess' place, and she may cut and serve the pieces of cake to each person.

- 2. Serve shortcake with or without cream.
- 3. Whipped cream is especially nice to serve with shortcake.
- 4. Serve shortcake at luncheon or at a light dinner as a dessert dish.

Table manners:

Rule: Shortcake should be eaten with the fork.

Cleaning up:

1. Should doughy dishes be put into the hot, soapy dishwater?

- 2. How should the molding board be treated?
- 3. Do not neglect the towels and dish cloth.

What has been learned:

- 1. To mix shortcake dough.
- 2. To use the same caution as in mixing biscuit dough.
- 3. To separate layers of crust with a fork instead of by cutting.
 - 4. To use fresh or cooked fruit for shortcake.

Additional Recipes

SHORT CAKE, No. 1

One pint flour, one-half teaspoon salt, two teaspoons baking powder, sifted together four times, one-quarter cup butter rubbed in, one egg beaten and mixed with one scant cup milk. Spread on a biscuit tin and bake in quick oven. Pull apart after cooling five minutes, spread with softened butter and fill with fruit.

SHORT CAKE, No. 2

One quart flour, one teaspoon salt, four tablespoons baking powder, sifted together four times, rub in one-half cup butter and lard and one-quarter cup milk. Bake in two long biscuit tins, making off in squares before baking. Bake in a very quick oven till a good brown. Use a generous quart of fruit for each layer, dust thick with powdered sugar. Pile whipped cream on the top layer just before serving. If it is wanted very crisp and short, like pastry, the amount of shortening is doubled and water used to mix rather stiffer than before. All butter makes it more crisp than lard.

OLD FASHIONED SHORT CAKE

Take one large cup of rich sour cream, one-half teaspoon salt and the same of soda sifted four times with one pint flour, mix, and beat well for two minutes. Take a twelve-inch frying pan, have it buttered and hissing hot, spread in the short cake, cover with a flat tin and set over hot griddle. Do not burn; turn in less than ten minutes; when done, break in pieces and send to table folded in napkin.

PASTRY

Lesson LIV

PLAIN PASTRY

Materials used:

Class RuleHome Rule $\frac{1}{4}$ c floursalt $1\frac{1}{2}$ c flour $\frac{1}{2}$ tp salt $1\frac{1}{4}$ tb fatcold water $\frac{1}{3}$ to $\frac{1}{2}$ c shorteningcold water

Utensils needed:

Bowl tablespoon molding board sifter teaspoon pie tin 2 knives rolling pin fork

measuring cup

Work to be done:

- 1. Sift the flour.
- 2. Measure the flour and salt and mix by sifting into a bowl.
- 3. Cut the fat into the flour by means of two caseknives. Continue until the mixture has the appearance of meal, and each little particle of fat has a coating of flour.
- 4. Add enough cold water, using the caseknife to mix the flour and water until a paste is formed that does not crumble,



Fig. 68.—Cutting Fat into Flour

but clings together without sticking to the bowl or knife.

5. By means of a knife, make the paste into a ball, rolling it along the sides of the bowl, thus taking up every particle of flour and dough.

- 6. Lightly dredge the molding board with flour
- 7. Turn the paste out, pat into a rectangular shape with the rolling pin, and roll out to a thickness of about $\frac{1}{4}$ inch, always rolling away from you instead of back and forth. If the paste has a tendency to stick, dust some more flour on the board and rolling pin, but no more than is absolutely necessary.



Fig. 69.—Dredging the Moulding Board

- 8. Put the paste in the pie tin in such a manner that all air is excluded from underneath, or cover the outside of an inverted tin, pricking paste with a fork.
 - 9. Trim off the edges.
 - 10. Bake in a moderate oven until delicately browned.

Principles:

The more solid the shortening is, the less flour it will take up. For this reason it is very important that all the ingredients should be kept as cool as possible. The amount of flour in proportion to the shortening is of great importance, for upon this, to a great extent, depends the "shortness," or tenderness, of the crust. For this reason also, as little flour as possible should be used for dredging the board and rolling pin during the process of rolling out the paste.

Just enough water should be used to cause the paste to stick together, for the less the amount of water, the more brittle the crust will be. The paste should be put together quickly and handled as little as possible. An undue amount of handling results in a tough crust.

Lard makes a light-colored, tender, flaky crust. Cottolene makes a crust that is slightly darker. Different kinds of short-ening may be combined and give satisfactory results; beef suet and butter are a good combination. Butter gives a slight flavor.

What has been learned:

- 1. Shortness, or tenderness, of crust is dependent upon:
 (a) Amount of flour used in proportion to amount of shortening; (b) amount of water; (c) temperature of ingredients;
 (d) amount of handling; (e) time required to combine the ingredients.
- 2. The flakiness of the crust depends upon the kind and amount of shortening used.

Additional Recipes

PASTRY

2 c flour ½ c butter cold water
2 tb lard ½ tp salt

Combine as in the class rule of the first recipe.

PASTRY WITH BAKING POWDER

1½ c flour ½ tp salt cold water
½ to ½ c shortening ½ tp baking powder

Combine as in the class rule of the first recipe.

Lesson LV

PEACH OR APPLE RIE

Materials used:

Pie crust:

 $\frac{1}{4}$ c flour $\frac{1}{3}$ tb butter salt $\frac{3}{4}$ tb lard white of one egg cold water

Filling: Canned fruit

Utensils needed:

Measuring cup	teaspoon	rolling pin
flour sifter	case knives	molding board
tablespoon	bowls	pie tin

Work to be done:

- 1. Make paste according to directions given in preceding lesson.
- 2. Cut paste into two parts. Roll out one part and put it in a pie tin, being careful to exclude all air from underneath. Rub it over with the white of an egg.
- 3. Roll out the other piece of pastry. Gash it in any design desired with a knife.
- 4. Turn the filling into the pie. Sprinkle a little flour over the fruit.
 - 5. Moisten the edge of the lower layer with cold water.
 - 6. Place the upper crust in position.
 - 7. Press the top crust well down over the edge of the second.
 - 8. Trim off the edges.
- 9. Bake in a moderately warm oven until the crust is of a delicate brown.

Principles:

The thin fruit juice has a tendency to soak into the crust. Rubbing the crust over with the white of egg forms a mucilag-



Fig. 70.—Funnel Inserted into Pie

inous, or sticky, layer through which the juice cannot easily penetrate.

The same purpose is effected by sprinkling the fruit with flour, for in this manner the juice becomes thickened and will not so readily soak into the crust. Sometimes a little paper funnel is inserted through the top crust in order to prevent the escape of the juice. The soaking is something that must be very carefully

guarded against, for if the juices escape, they will cause the under crust to stick to the pie tin, making the pie less attrac-

tive. The escaping juices will cause a disagreeable odor and smoke, besides being very difficult to remove from the oven.

The heat of the oven will cause steam to be generated within the pie. Some provision must be made for the escape of the steam, for if allowed to remain, the crust will become watersoaked and will not bake. For this reason, the top crust must be slit with numerous openings.

The use of part butter gives a flakier crust and a better flavored one than if lard alone is used.

Serving:

Pie is served as a dessert for dinner. It is served on a dessert plate usually with a piece of cheese, which is commonly supposed to aid in digestion of the pie, placed at the side. It is now quite common also to bring the whole pie to the table. It is placed in front of the hostess who cuts and takes out the pieces with a pie knife, placing on dessert plates which are at her left.

Table manners:

Rule: The fork alone should be used in eating pie.

In some localities, it was in earlier days a custom to use the knife and fork to cut the pie and to use the knife to convey the cut portions to the mouth; but this custom is no longer followed. Only the fork is used for cutting and conveying to the mouth. Cleaning up:

If any juice does escape, quickly sprinkle the bottom of the oven with salt, and the odor and smoke will be prevented. To remove the burnt substance, put a newspaper on the desk or table and tip the oven over to one side. If burnt to the pie tin, pour boiling water into it, and scour with sapolio.

What has been learned:

- 1. That the escape of fruit juice from the pie can be prevented:
- (a) By rubbing the bottom crust with white of egg. (b) By sprinkling flour over fruit. (c) By inserting a paper funnel through top crust.
- 2. That slits must be made in the top crust to allow the steam generated in the baking to escape.



Additional Recipe

APPLE PIE

4 or 5 sour apples cut up 1 tp butter 1 tp lemon juice

tp grated nutmeg a few gratings of lemon rind

to salt

Line a pie tin with paste. Pare, core, and cut the apples into eighths. Fill pie. Mix sugar, nutmeg, salt, and lemon juice and sprinkle over the apples. Put dots of butter here and there. Put upper crust on, first wetting edges with cold water. Press together and trim. Bake in a moderate oven.

Lesson LVI

CUSTARD PIE

Materials used:

Pie crust: Filling:

½ c flour 7 tb milk
⅓ tb lard salt

\$\frac{2}{3}\$ tb butter 1 egg volk and \$\frac{1}{3}\$ white

salt 1 tp sugar

water nutmeg or cinnamon

MERINGUE

 $\frac{1}{2}$ egg white 1 tp sugar

Utensils needed:

Bowls rolling pin egg beater case knives molding board wire whisk flour sifter teaspoon large plate or measuring cup tablespoon platter

Work to be done:

- 1. Sift, measure, and mix flour and salt.
- 2. Cut the lard into the flour. (See Lesson XLIX.)
- 3. Add enough water to make a stiff paste, proceeding according to directions given in the lesson upon it.
 - 4. Dredge board with flour, turn out paste, pat it into rec-

tangular shape, and roll out into a piece about twice as long as it is wide. Pat the butter into a square cake and place near one end of this rectangle.

5. Fold the paste over the butter. Press the edges together. Fold 1 over 2 and 3 over 1. Press edges together. Turn around toward you. Pat the paste into ridges

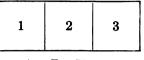


Fig. 71

with the rolling pin. Fold over again and roll. Repeat two times more, being careful not to allow the butter to come out.

- 6. Cover the inverted tin, prick, and bake.
- 7. Break the egg and separate the yolk and the white.
- 8. Beat the white slightly until a spoonful can be held. Divide it into two parts, adding half to the yolk in a bowl.



Fig. 72.—Patting Paste into Ridges

- 9. Beat white and yolk enough to mix. Add the salt, sugar, and milk. Beat.
- 10. When the crust is a delicate brown, invert it in the pie tin, turn the filling in, sprinkle with nutmeg over top, and bake in a slow oven until the custard is done.
- 11. Beat the remaining egg on a platter until stiff and dry. Add a teaspoon of sugar. Beat until well mixed.

- 12. When the custard is firm in the center, remove pie from the oven, put the beaten egg white over the top of the pie, either spreading it out smoothly with a knife or putting it on in fancy shapes if so desired.
- 13. Transfer pie to a slow oven and bake until the meringue, or egg white, is delicately browned.

Principles:

If the butter is added to the flour before the water is added, the crust is more tender than if lard alone is used. By putting the butter in between layers of paste, pressing together edges and patting with the rolling pin, cold air is inclosed between layers of paste. When this air encounters the heat of the oven, it expands, causing the paste to expand also and giving lightness to it. This paste is different from the paste made in the ordinary way in that the layers are very distinct, making it more flaky.

Serving:

Custard pie forms the dessert for a dinner.

Cleaning up:

Soak all sticky dishes and wash and rinse carefully.

What has been learned:

- 1. That a more tender crust may be made by using part butter and part lard.
- 2. That a flakier and lighter crust may be made by working the butter in after the water has been added.
 - 3. That a custard pie should be baked in a slow oven.
 - 4. That a meringue should be baked in a slow oven.

Additional Recipe

CREAM PIE

Beat thoroughly together the white of one egg, $\frac{1}{2}$ c sugar and 1 tb flour; then add 1 c rich milk (a part cream); bake with a bottom crust, and grate nutmeg over the top.

SALADS

Lesson LVII

LETTUCE AND RADISH SALAD WITH FRENCH DRESSING

Materials used:

Class Rule

1 tp salt

 $\frac{1}{16}$ tp pepper

1½ tb olive oil

1 tb lemon juice or vinegar a few grains cayenne, pap-

rika or black pepper

2 or 3 leaves of lettuce

4 radishes

Home Rule

½ tp salt

1 tp pepper

6 tb olive oil

2 to 6 tb lemon juice or vinegar

a few grains of cayenne, paprika or black pepper desired quantity of lettuce a dozen radishes

Utensils needed:

Large bowl or pan in which to cleanse vegetables towels in which to dry vegetables paring knife bowl in which to mix dressing utensils for measuring ingredients 2 forks with which to mix salad

Work to be done:

- 1. Separate the lettuce by removing the leaves from the outer stalk.
 - 2. Discard outer injured leaves.
- 3. Wash each leaf and examine it separately to see that no insects remain on it.
 - 4. Crisp the leaves, if necessary, in cold water.
 - 5. Dry them thoroughly between the towels.
 - 6. Wash the radishes and scrape off the soil and rootlets.

- 7. Cut two of the radishes into thin slices and dry with the lettuce.
- 8. Cut the leaves off from the other two, leaving about one-half inch of the stalk. Be sure no dirt is left among the stalks.
 - 9. Make these into "radish roses." See Lesson XII.

FRENCH DRESSING

- 1. Mix the salt and pepper in the bowl.
- 2. Add the oil and mix well.
- 3. Add the vinegar and lemon juice, a drop at a time, beating



Fig. 73.—Making French Dressing

thoroughly all the time.

- 4. Beat until the mixture is quite thickened and well mixed.
- 5. Place the lettuce in the dish from which the salad is to be served, pour the dressing over and toss up and down

with the fork until the dressing has all been absorbed.

6. Serve on salad plates and garnish with radish roses. Serving:

A vegetable salad such as this is always served at dinner or luncheon, usually as a separate course. The housewife then usually prefers to mix her own dressing while at the table. In such case, the ingredients are brought in and placed at her right. The vegetables, cleaned, crisped, and dried, are also brought in. A large bowl is used for mixing the salad. When the salad is prepared, it is placed on salad plates and served with a salad fork. When the salad is served with the meat course and on individual plates, it is placed at the left hand above the course plate.

Table manners:

Rule: Always eat salads with a fork.

If this seems difficult, aid the fork by holding the salad with a piece of bread or wafer.

Remarks on salads:

A few years ago, salads were practically unknown at our meals, but now we have them often at dinner or luncheon, where they are served as a separate course.

Salads may be made of almost any vegetable, fresh or cooked, fresh and sometimes cooked fruit, nuts, meat, and fish. They may be roughly divided into four classes. These are:

- 1. Salads made from herbs, cultivated or wild, served uncooked, alone or combined with lettuce, and usually served with French dressing. Examples are water-cress, endive, and dandelion.
- 2. Salads having lettuce as a foundation, with uncooked fruits or vegetables. These are served with French or mayonnaise dressing. (See next lesson.) They may also be served with cooked dressings. Examples are Waldorf, cucumber, tomato, or fruit salads.
- 3. Salads having lettuce as a foundation and made with cooked vegetables. The vegetables may be marinated (see below) an hour or so with oil. These salads may be served with any dressing. Examples are: potato, carrot, beet, beans, or peas, or a mixture of these.
- 4. Salads with lettuce or celery as a foundation, with cooked meat, fish, or eggs cut in dice. Such salads should be served with mayonnaise dressing.

To "marinate," means to add salt, pepper, oil, and vinegar to a salad ingredient or mixture and allow it to stand until well seasoned. Cooked vegetables, such as potatoes, peas, beans and other legumes are so treated, as are also meat, fish, and poultry diced. The object is to cause the juices of vegetables or meat to become saturated with the flavor; if they do not come in contact with the oil and vinegar until they are to be served,

the flavor is not appetizing; but when the salad ingredients have been marinated, they should be thoroughly drained before the dressing is added to them; if they are not, the dressing may become watery or thinned, thus detracting from the appearance of the salad. French dressing is much used for marinating. Cleaning up:

- 1. Place all worthless pieces of vegetables in the garbage can.
- 2. Put all vegetables which may be used again in covered pails and place in the ice box.
 - 3. Wash every dish used and put in its proper place.

What has been learned:

- 1. Classification of salads.
- 2. To marinate means to moisten a salad mixture with French dressing and then allow it to stand until well seasoned.

Lesson LVIII

POTATO SALAD

Materials used:

Class Rule

½ c cold boiled potatoes cut in half-inch cubes

¹/₄ apple cut in quarter-inch cubes

½ c finely cut celery

Home Rule

2 c cold boiled potatoes cut in half-inch cubes

1 apple cut in quarter-inch cubes

1 c finely cut celery

1 tp salt

1 tp mustard

Dressing:

tp salt
tp mustard
tp sugar
a few grains cayenne
to flour
egg yolk or 4 egg
tb scalded milk
tb hot vinegar
tp melted butter

2 tp sugar a few grains cayenne 1 tb flour yolks 2 eggs or 1 egg \(^3\)_4 c scalded milk \(^1\)_2 c hot vinegar

2 tp melted butter

Utensils needed:

Bowl for beating the egg bowl for mixing the ingredients wooden spoon for stirring granite pan for heating the vinegar knife for dicing apples. double boiler for scalding
milk
egg beater
spoons and knives
towel for drying celery
bowl for mixing the salad

Work to be done:

1. Mix dry ingredients.

potatoes and celery

- 2. Beat the egg slightly, add to the dry ingredients, and mix thoroughly.
 - 3. Add the scalded milk, stirring all the time.
- 4. Pour all in double boiler and add hot vinegar; stir until it becomes thick.
 - 5. Add butter.
 - 6. Cool before it is used.
 - 7. Dice the potatoes.
 - 8. Pare the apple and dice it.
- 9. Cleanse the celery, cutting out all bad spots, and wash thoroughly. Cut in small pieces and dry in towel.
- 10. Place all in the bowl, moisten with dressing, and garnish with celery tips or hard boiled eggs sliced.

Serving:

This salad, because it contains so much hearty food, is a favorite at picnics. It may also be served as the principal dish at a luncheon or a cold supper, but never as a course at a hearty dinner.

A pretty garnish for this salad may be made of hard-boiled eggs and cooked beets. Chop the whites and arrange on a fourth of the mound of salad; chop beets finely, mix with 1 the of vinegar, and let stand 15 minutes, then arrange on the two fourths next to whites. Chop the yolks or force them through a potato ricer and arrange them on the remaining fourth of the

mound, opposite the whites. Put small sprigs of parsley in the lines which separate the garnishes. Garnish with parsley at the base.

Remarks on salad dressing:

Salad dressings are usually divided into three classes: French, mayonnaise, and boiled. French dressing is made of olive oil and vinegar, with seasonings. Mayonnaise dressing also has the oil and the vinegar, but these are combined with egg yolk and seasonings. In boiled dressings, the ingredients are combined by cooking. These may be of two kinds, with cream and without cream. Dressings containing cream have the egg yolks, vinegar, and seasonings combined by cooking, and the cream, whipped, is added when the dressing is to be used. Dressings without cream are made from milk and eggs as a foundation and are seasoned with vinegar, salt, pepper, and mustard. The fat used is usually butter. Boiled dressings may have flour added to them as a thickening agent; when flour is used, less egg yolk is needed. Egg yolks are added to boiled dressings for flavor, richness, and as a thickening agent.

Cleaning up:

Clean up, observing rules given in previous lessons.

What has been learned:

- 1. A hearty salad should not be served at a hearty meal.
- 2. In boiled dressings, the principal thickening agent is egg yolk; flour may also be so used.
- 3. The three kinds of salad dressings are French, mayonnaise, and boiled.

Lesson LIX

FRUIT SALAD

Materials used:

Class Rule	Home Rule
1/4 orange	2 oranges
1/3 banana	3 bananas
3 grapes	$\frac{1}{2}$ lb Malaga grapes
3 slice pineapple	4 slices pineapple cubed
4 walnuts	12 walnuts

Dressing:

1 yolk	3 yolks
1½ tb sugar	$\frac{1}{3}$ c sugar
1½ tb vinegar	$\frac{1}{3}$ c vinegar
$\frac{1}{16}$ tp salt	½ tp salt
a few grains pepper	½ tp pepper
whipped cream	whipped cream

Utensils needed:

Bowl for mixing ingredients	double boiler
bowl for whipping cream	bowl for mixing salad
paring knife	spoons and knives for
wooden spoon for stirring	measuring
wooden spoon for stirring	measuring

Work to be done:

- 1. Mix the yolks, sugar, salt, and vinegar.
- 2. Cook the mixture in the double boiler, stirring all the time.
- 3. Cool the mixture.
- 4. Add whipped cream when ready to serve.
- 5. Cut the fruit and nuts into appropriate pieces.
- 6. Place them in bowl and mix with the dressing to which the whipped cream has been added.

Serving:

This salad could be appropriately served in orange cups, or oranges which have been cut in halves crosswise and from which the pulp has been removed. If this is done, place a

large lettuce leaf on a plate, place the orange cup upon this and pile the salad into it. Serve with crackers. This salad may be



Fig. 74.—Salad in Orange Cups

served at a hearty meal either as the salad or the fruit course.

Remarks:

The two most important things to remember in preparing salad ingredients is to have them clean, if of fresh vegetables. and absolutely

crisp. Wilted salad ingredients do not look appetizing and are not wholesome. All leaves used in salads should be treated just as were the lettuce leaves in the first lesson.

Tomatoes that are to be used for salads should have the skins removed. How is this best done? When this has been done, the hard centers should be cut out around the stems, and the tomatoes set near the ice to become chilled.

When salad plants are brought from the market, they should be kept from the air in closed vessels or tightly wrapped in paper. Celery should not be put into water until just before serving, because it rusts so easily. Celery is crisped in the same way as lettuce. It should be drained and wiped dry. stalks should be separated from the root and from each other. . washed, drained, and wiped dry as before. All the remnants not used in the salad should be saved, as they are good for soups.

All cooked meat should be cut into small dice, freed from fat, bone, and gristle, marinated, and chilled. Cooked vegetables also should be cut into uniform pieces, marinated, and chilled. When ready to serve, they should be thoroughly mixed with mayonnaise dressing and arranged on a bed of green lettuce leaves.

To give a taste of onion to potato or other salad, a little onion juice may be squeezed into the dressing or the bowl in which the dressing is to be mixed may be rubbed with onion or garlic. Pieces of onion or garlic should never be dropped into the salad.

What has been learned:

Rules regarding the care and preparation of salad ingredients.

Lesson LX

EASTER SALAD

Materials used:

Class Rule

Home Rule

Neufchatel cheese cream

salt and pepper chopped nuts lemon juice (if desired)
lettuce leaves
1 green pepper

11 to powdered sugar

a few grains cavenne

1 to melted butter

volk of one egg

½ c hot vinegar

½ c thick cream

1 tp mustard

1 to salt

2 to flour

Dressing:

tp mustardtp salt

tp flour

‡ tp powdered sugar a few grains cavenne

to melted butter

1 egg yolk

1½ tp hot vinegar

2 tp thick cream

bowl for mixing ingredients silver knife for shredding lettuce

Utensils needed:

Wooden spoon spoons and knife for measuring

Dressing:

Double boiler bowl for mixing dry ingredients wooden spoon for stirring spoons and knife for measuring bowl for whipping cream

The dressing:

- 1. Add dry ingredients.
- 2. Add melted butter and mix.
- 3. Beat egg and add, mixing well.



- 4. Heat vinegar in granite pan.
- 5. Add vinegar to the mixture slowly, stirring all the time.
- 6. Cook in double boiler until thick.
- 7. Cool the mixture.
- 8. Beat cream and add to the dressing when ready to use.

The salad:

- 1. Cream the cheese.
- 2. Thin slightly with a little cream.
- 3. Add seasonings and mix.
- 4. Add nuts and work them into the mixture.
- 5. Make into small egg-shaped balls.
- 6. Shred lettuce by laying the leaves in a pile on each other



Fig. 75. - Easter Salad

- and cutting through the pile with a silver knife. Cut into ½-inch strips or even narrower. (It should look like grass.)
- 7. Cut the peppers around and around with the scissors into very narrow strips.
- 8. Place the lettuce and peppers on a plate, arranged like a nest with the peppers more in the center.
- 9. Place three or four eggs in the nest, and put dressing over the eggs.

Remarks:

In this salad there is a new method of arranging the ingredients. An ingenious housewife or cook can think of many more variations of the ingredients given in the preceding lessons.

Principles:

A salad composed mostly of greens does not have a large food value, but when cheese, meat, cooked vegetables, or fruit enter into the combination, its food value is considerable. The olive oil, butter, and cream used in this dressing furnish fat in an easily digestible form. It is believed that the acid used helps in the digestion of the woody fibres and the salts and minerals found in the green vegetables are of great use to the body. In addition, the salad itself is appetizing and refreshing. Where one cannot have both a salad and a dessert at dinner, it is often better to have the salad only, as it is usually more easily digested than a rich pudding or pie. A salad should be served at least two or three times a week.

Serving:

A salad of this kind properly belongs in the salad course of a dinner or formal luncheon. Mayonnaise dressing may be used in place of the cream dressing.

Cleaning up:

Clean up as directed in previous lessons.

What has been learned:

- 1. Salads supply valuable mineral salts to the body.
- 2. They are valuable in the diet because of their freshness and their appetizing qualities.

Additional Recipes

CREAM SALAD DRESSING

Rub the yolks of three hard-boiled eggs to a smooth paste; add gradually to them one teaspoon salt, one-fourth teaspoon sugar, one-half saltspoon cayenne, one teaspoon mustard and two tablespoons vinegar; have one pint cream very cold and whip till thick and smooth; beat this, a tablespoon at a time, into the mixture with a whisk.

WALDORF SALAD

One cup sour apples, one cup celery, one tablespoon lemon juice, one-half cup walnut meats broken in pieces. Cut apples in thin slices; cut celery in small pieces. Dust with salt and pepper. Mix with mayonnaise or boiled dressing.

SANDWICHES

Lesson LXI

SANDWICHES

Lettuce sandwiches:

Cream butter in a bowl till soft enough to spread easily. Place a loaf of bread that is about 24 hours old on a wooden board. Hold the loaf with the upper crust toward you and with a sharp knife cut off as many thin slices as desired. Remove the crusts, but keep in the order cut. Put slices together in pairs. Cut in squares, oblongs, or triangles. Butter the slices. Put a crisp lettuce leaf, which has been thoroughly washed and dried, between each two slices. Put a spoonful of dressing on each leaf. Press the two slices together.

Egg sandwiches:

Boil eggs until hard. How should they be boiled? Remove the shell. Separate the whites from the yolks. Chop the whites fine in a chopping bowl. Force the yolks through a strainer or potato ricer. Mix the whites and yolks, season with salt and pepper. Mix with enough salad dressing to moisten. Spread between slices of bread prepared in the same way as for lettuce sandwiches.

Nut sandwiches:

BOILED DRESSING

 $\frac{2}{3}$ c vinegar a speck of cayenne 1 tp salt 1 tp mustard 1 tb sugar 2 eggs

Mix vinegar, salt, mustard, sugar, cayenne, and butter, and cook until the boiling point is reached. Beat eggs until light in top of double boiler. Pour the hot vinegar over beaten eggs slowly, stirring constantly. Cook over hot water until it thickens, stirring all the while.

Use peanuts, English walnuts, filberts, or hickory nuts.

Chop nuts fine in a chopping bowl. Turn them into another bowl and mix in enough boiled dressing to moisten them. Cut thin slices of bread. Put them together in pairs. Cut with fancy cutter, reserving the crusts for use as bread crumbs. Spread with butter. Spread the nuts on one slice and fit the other on top and press together.

Cheese and English-walnut sandwiches:

1 lb grated cheese

1 lb English walnuts

1 lb butter

salt and pepper

Cream the butter. Add the seasonings and grated cheese gradually, then mix in nuts which should be sliced very thin: spread mixture on slices of bread and press together in pairs.

Olive and pimento sandwiches:

Mix equal quantities of chopped stuffed olives, pimentoes

and sweet pickles with boiled dressing. Spread between thin slices of buttered bread.

Ribbon sandwiches:

Cut brown bread and white bread into thin slices. Spread with



Fig. 76. - Sandwiches

creamed butter. Press together three slices of white and three of brown, putting first a slice of white then one of brown, one of white and so on. Trim off the crusts and slice as ordinary bread. These are served with oysters, and salads.

Sliced ham sandwiches:

Slice cold boiled ham as thinly as possible. Put between thin slices of buttered bread.

Ham with sauce Tartare:

Finely chop cold boiled ham. Moisten with salad dressing. Chop equal amounts of olives and pickles. Add to the ham. Spread between thin slices of bread. Class Rule: 2 tb ham: 1 tb dressing; 1 tp chopped olives and pickles.

Ham with white sauce (Class Rule):

White sauce: $\frac{1}{4}$ tb butter; $\frac{1}{4}$ tb flour; $\frac{1}{8}$ c milk; seasoning. Mix with 1 tp finely chopped ham. Spread between slices of bread.

Date sandwiches:

Wash, stone, and chop dates. Mix with half as much chopped nuts. Moisten with boiled dressing or mayonnaise. Proceed as before.

How to serve sandwiches:

- 1. Serve sandwiches piled on a plate covered with a doily.
- 2. Sandwiches may be served at luncheons, dinners, five o'clock teas, or picnics.
- 3. For the lunch or picnic basket, wrap the sandwiches in oil or paraffine paper.
 - 4. Sweet sandwiches may be offered with cocoa or tea.
- 5. Sandwiches may be served at the beginning of the meal with the oysters, or with the salad.

NOTE TO TEACHER: This lesson has not been outlined as the previous lessons, as practical work will have to depend upon the number of pupils in class, material on hand, and the use to be made of the sandwiches.

The class may be divided into groups, and different kinds of bread used and different kinds of sandwiches made by each group.

At the end of the lesson, the different kinds of fillings and sandwiches may be discussed, and comparisons made as to cost, food value, and ways of serving.

BEVERAGES

Lesson LXII

BOILED COFFEE

Materials used:

Class Rule

1 rounding tb of coffee for each cup water

 $\frac{1}{2}$ tp egg and water

1 c boiling water

Home Rule

Measure the number of cups desired, add rounding the for each cup of water and a proportionate amount of egg. One egg is enough for 1 cup of ground coffee.

Utensils needed:

Granite ware coffee pot cup for mixing egg and coffee tablespoon for measuring

Work to be done:

- 1. Beat the whole egg slightly and dilute with $\frac{1}{4}$ c cold water before it is measured out.
 - 2. Place the egg in a cup and add the coffee. Mix.
 - 3. Scald the coffee pot.
 - 4. Add the coffee and 1 c boiling water.
 - 5. Place on the fire and let boil three minutes.
- 6. Take from the fire and let stand in a warm place ten minutes.

Principles:

Coffee contains three important compounds: Caffeine, which gives to coffee its stimulating effect; tannin, which is poisonous and gives to coffee a bitter taste; and aromatic oils, which gives it its delightful aroma. The tannin is extracted by boiling; for this reason, the coffee should not be boiled longer

than three minutes. Hot water does not extract the tannin, but does extract the caffeine. For this reason filtered coffee is more healthful than boiled coffee; it has the caffeine extracted, but not the tannin.

Much has been said both for and against the use of coffee as a beverage. If an adult is perfectly healthy, moderate amounts of coffee of medium strength will not be injurious; but the stimulating effects of coffee are harmful to children



Fig. 77.—An After-dinner Coffee Service

and to all nervous, delicate people, hence they should never use it.

Serving:

Coffee is used at breakfast and dinner by most people. Some people like the coffee with their dinner, others prefer to have it after

the dessert. At a formal dinner, very strong coffee is made and served without cream, but with or without sugar as the individual prefers. Such coffee is called café noir, or black coffee. It is served in very small coffee cups, or after-dinner coffee cups. When cream and sugar are served with coffee, many think the flavor of the coffee is improved if they are placed in the cup before the coffee is poured in.

Table manners:

Rule: Coffee, tea, and cocoa should be drunk from the cup. The spoon is used to stir coffee and to sip it in order to ascertain if the flavor is right, but should not be otherwise used with coffee or tea. It seems unnecessary to state that these beverages are never to be drunk from the saucer.

Cleaning up:

1. Empty the coffee grounds into the garbage can.

- 2. Soak the cup in which the egg and coffee were mixed in cold water.
- 3. Wash the coffee pot in warm, clean, soapy water, being careful to cleanse the inside and the spout well, and rinse in hot water.
 - 4. Wipe the pot dry inside and out and place in its proper place.
 - 5. Wash the other dishes as before directed.

NOTE TO TEACHER: If the laboratory is not supplied with coffee pots, the granite pans, covered, will do just as well.

What has been learned:

- 1. Coffee contains three compounds; caffeine, tannin, and aromatic oils.
- 2. Caffeine is the stimulating principle, tannin is poisonous and bitter, the aromatic oils give to coffee its aroma.
 - 3. Filtered coffee is less harmful than boiled coffee.
 - 4. Nervous people and children should not drink coffee.
- 5. The harm arising from leaving the grounds in the coffee pot for several days at a time.

FILTERED COFFEE

Materials used:

1 rounding to of coffee 1 cup boiling water

Utensils needed:

French coffee pot

Work to be done:

Place the coffee in the strainer, the strainer in the coffee pot, and the pot on the range. Add the water and allow to filter until all the water has passed through the strainer. If desired stronger, let pass through again. Serving:



Fig. 78.—French Coffee Pot

Serve at once with cream and cut sugar.

NOTE TO TEACHER: If desired, divide the class, allowing one group to boil coffee and the other to make filtered coffee. But if there is only one French coffee pot in the laboratory, make filtered coffee as a demonstration lesson.

Lesson LXIII

Coffee (Reading)

Many boys and girls are familiar with the appearance of coffee berries as they come from the store. They had a long and tedious journey before they reached the store, for coffee berries do not grow in this country. Their home is in far away Africa in the mountainous country just west of the Red Sea. It is said that many, many hundred years ago a certain goat herder in that country noticed that when his goats had eaten of the leaves and berries of a certain tree, they became very active and frisky. So he ate some of the berries himself to see what effect they would have upon him. His neighbors accused him of drinking wine unknown to them. Of course he denied this and told them that he had eaten of the fruit of a certain tree. So they all ate some of the berries and they liked the results so well that they told others of their experience. In this way the knowledge spread farther and farther. Men who had become acquainted with the effects of the coffee berry carried the seeds with them when they went to far away regions to make their homes. It was in this way that the cultivation of the trees spread, at first chiefly in an easterly direction.

The coffee tree is a very delicate one. It cannot endure the extreme heat; and a frost is death to it. Its home was near the equator in a mountainous country; whenever there is such a region provided with plenty of rainfall, the coffee tree will thrive. As has been said, the coffee trees were first carried eastward from their home. They were taken to Java, Sumatra, the Philippine Islands, and other eastern lands. In Java the sun is very hot, so the delicate coffee trees are shaded by the overarching branches of shade trees which are planted among them.

The story of how the first coffee trees were brought to this country is a very interesting one. A certain merchant who had

settled in southern Brazil thought that the rich soil and warm climate of that country ought to grow coffee trees. out on a long journey across the Atlantic in search of coffee Ocean travel in those days was not so speedy and comfortable as it is now, so a journey such as he undertook was fraught with many dangers. But he reached Africa safely. and did succeed in obtaining a few plants. On the way back an accident on the ship caused a scarcity of water and no one was allowed more than one quart a day. He divided his quart equally among his plants, but when the ship reached land, only two of them were alive. However, he planted these and from them have been raised the greater number of coffee trees in Brazil, although since then many more trees have been brought from Africa to Brazil. One can realize how much this one man's effort has meant to Brazil when it is known that in Brazil today is raised two-thirds of the world's coffee.

The people of the United States are the greatest coffee drinkers in the world. They buy enough coffee each year to give to each woman and child in the country twelve pounds during the year. For this large amount of coffee is spent each year, ninety million dollars. The entire crop of the world amounts to about twenty-three hundred million pounds and all but two hundred million pounds of that amount comes from this hemisphere; most of the remainder comes from the East Indies and other islands of the East. How wonderful it is when we consider that this large crop had its beginning in two little plants which a man nursed so carefully through a tedious ocean voyage.

A coffee plantation, always on the sides of hills, is a very interesting place. The coffee berries are planted in nurseries, not out in the open fields as are cotton and other plants. They soon sprout and when they are a few inches high, each is transplanted to a little hole over which sticks and leaves are laid to protect it from the sun. Weeds must be kept down, hence the plants are cultivated until they are four years old. Then

they are set out ten feet apart each way. They now begin bearing and may continue to do so for thirty years or more.

These trees are a species of evergreen with dark green, glossy leaves, among which may be seen the glistening, dark scarlet berries. As the trees are never allowed to grow more than twelve feet in height, they look like shrubs. The trees begin to put forth their fragrant white blossoms in December, just when our snow storms are beginning to fly through the air.

The flowering season lasts several weeks, just as it does with the cotton plant. In April and May the berries begin to ripen and the harvesting also lasts for many weeks. They begin their harvesting when in the United States the farmers begin their sowing. The women and children pick the berries by hand, placing them in baskets or sacks.

They must pass through several processes before they are ready for market. When the berries come in from the field, they are soft. If the pulp is removed, a white, quite hard skin will be found under it. If this is cut away, the two beans, pale green in color, will be found lying within it with their flat sides toward each other.

Before the beans can be roasted, they must be freed from the surrounding pulp and skin. This is done by machinery. The berries are carried to the factory by cars, by wagon, by muleback, or by chutes down the mountain side. To get rid of the pulp, the berries are run through machines which crush them without injuring the seeds. The resulting mush is carried away over a cylinder in which there are holes through which the beans surrounded by the skins, drop into large vats. In the vats these are scoured by a large screw operated by machinery so that they come out white as snow.

Outside the factories, large cement floors have been built. The berries are taken out to these floors and left in the sun for weeks until they are perfectly dry. During the night they must be protected from the dew, which is harmful to them, and they must also be carefully guarded from theft, for they are valuable property.

When the berries are thoroughly dried, they are passed through some more machinery which removes the two layers of skin. Before they are shipped they must be graded. This is done by passing the coffee over a series of graduated sieves by means of which the berries of the same size are gathered together and run out through the same pipe and into bags ready for shipping.

Before the coffee can be used, it must be roasted. Formerly this was done entirely at home in an iron pot over the fire or in the oven. Now it is done almost entirely in factories in large heated cylinders which are turned by machinery. In this way a more uniform roast can be obtained than by the old method. It takes about one hour and forty-five minutes to roast coffee; if it is left in the roaster too long, it will be spoiled. After roasting, it is ground or left whole and sealed in packages.

Lesson LXIV

TEA

Materials used:

1 tp tea milk
2 c boiling water (water cream

freshly boiled) sugar, slice of lemon

Utensils needed:

Teapot, preferably of china teaspoon measuring cup cup and saucer

Work to be done:

- 1. Scald the teapot with a cup of boiling water; when the teapot is thoroughly heated, empty it. Let stand a moment on the hot stove to dry.
 - 2. Put 1 tp tea into the hot teapot.
 - 3. Pour 1 c of boiling water over the tea.
- 4. Let it stand five minutes covered on the hot stove, but do not allow it to boil.
 - 5. Serve the tea immediately.

Principles:

Tea owes its value in the diet to a substance known as theine. This substance has a stimulating effect on the nerves, and prevents tissue from wearing out. Theine can be drawn out of the dried tea leaves only by the use of boiling water. If the water is not boiling, the theine will not be dissolved, and the tea will not have that agreeable flavor given to it by this principle (the term applied to theine in chemistry).

When water is boiled a long time, the air is driven out of it, making it taste flat and insipid. This is the reason why briskly



Fig. 79. — Tea Service

boiled water should be used in making tea.

Besides theine, there is another substance in tea known as tannin, the same that is found in coffee. This is a very bitter substance, and if boiled out of the tea leaves would give the tea a very bitter taste. It has

been found that boiling the tea or letting it steep a long time will extract this tannin. Hence it can be seen how very important it is not to boil the tea or allow it to stand more than a short time before serving it.

The food value of tea is increased by the use of sugar and milk.

Serving:

Tea may be served plain, with cream and sugar, or with slice of lemon and without sugar, as desired. At an afternoon tea, wafers, cakes, or sandwiches are passed with it.

Cleaning up:

Wash the teapot with hot, clean, soapy water, rinse well and wipe dry. Allow to stand with cover off or open for a few minutes before putting it away.

What has been learned:

- 1. That tea has two substances in it, one to be extracted and the other to be prevented from extracting by proper methods of preparation.
- 2. That water boiled long is flat and insipid, and should not be used in making tea.
- 3. That boiling water extracts the theine, the valuable principle in tea leaves.
- 4. That boiling and long steeping extract the tannin, the undesirable principle in tea leaves.
- 5. That the value of tea is increased by use of sugar and cream.

Lesson LXV

TEA (Reading)

Tea is a beverage used by more than one-half of the human race. It was used ages ago by the Chinese and Japanese, and today these people drink more tea than all of the rest of the world put together. The British are the chief tea-drinkers of the white race. It is a favorite Russian drink, and every Russian family keeps a samovar (a metal vessel which utilizes hot charcoal as a means of heat), with boiling water ready for making it. They drink it out of tumblers without milk, but generally flavored with lemon. Some have a rather peculiar way of drinking it, putting a lump of sugar between the teeth and sucking the tea through it. The Swiss flavor their tea with a stick of cinnamon.

Tea is the dried evergreen leaf of a plant that very much resembles a camellia or willow bush. The flowers look very much like roses.

The wild tea plant grows to a height of fifteen or more feet, but the cultivated one is generally pruned to a height of from three to five feet. It is from the young tender leaves that have not yet unrolled that the tea of commerce is made. The tea leaves are picked by women and children. Several crops are picked from the same plant during the year, intervals of two or three weeks being left for new leaves to unfold.

The tea plant is native to the southern part of Asia and the slopes of the Himalaya Mountains. It has been cultivated from time immemorial in Japan and China, while half the tea exported comes from India, Ceylon, and Java. Tea of the very best quality does not bear transporting and is seldom found outside of the country where it is grown.

The tea leaf has to be prepared in a certain manner before it can be used. If an ordinary green tea leaf is steeped in boiling water, the resulting beverage would be very different from the appetizing tea with which all are familiar. According to the method of preparation, there are two kinds of tea on the market, black tea and green tea.

To make black tea, the leaves as soon as they are picked are spread out on travs under an awning. Very soon they begin to wilt, become limp, and get dark colored with red and brown spots here and there. A peculiar odor, due to what is known as fermentation, is given off. Experienced workmen, who tell by the odor when fermentation has gone on long enough, gather up the leaves and spread them on long tables, where they are rolled into large balls by women. These balls are then squeezed in order to press out the water, and packed tightly in large round baskets where fermentation is again allowed to set in. After being rolled again, the tea is roasted on iron gauze sieves over a fire of charcoal. It is then sorted and the seeds and foreign matter are removed. The tea is made ready for shipment by being packed in large chests covered with sheet lead and then matting to exclude all moisture.

In curing green tea, the leaves are allowed to ferment. A short time after they are gathered, they are roasted in pans or steamed. They are then rolled by hand upon a table and again roasted for an hour or more. During the process of roasting, they are occasionally stirred. They come out from this process with a dark green color, which gradually lightens. In Japan, green tea is often cured by putting the tea leaves in baskets and drying them in the sun. This kind of tea is known as "basket-fired," or "sun-dried."

There is another kind of tea, used to a large extent in Russia, which is known as brick tea. It is made by grinding the leaves, steaming them till soft and mushy, and pressing the pulpy mass into brick molds. Brick tea is used largely by the inhabitants of Tibet and Mongolia, who prize it so highly that they use the bricks as money, each brick passing for a value equal to about fifteen cents.

According to the locality where produced, the time of collecting, stage of leaf development, etc., teas are known by various names. Some of the brands of black tea are Oolong, Formosa, Orange Pekoe. Pekoe tea is made from the very youngest and topmost leaves of the plant. It can be readily distingished by the little yellow tip of each leaf. It is scented with orange leaves. All Pekoe teas are very expensive.

The best green tea comes from Japan. Some brands are Hyson, Japan, and Gunpowder.

All tea importers have buyers in the tea-growing countries. These buyers must be "tea tasters," that is, they must be able to detect by odor, examination, and taste just the difference between teas, and how much each is worth.

VALUE OF TEA IN THE DIETARY

Tea is valuable on account of its stimulating effect on the nervous system whereby it helps tired nerves to recover themselves. It is a good thing for grown people to use if taken moderately. When tea is used, less food is required, for by

its use less tissue is worn out, and consequently there is less tissue to repair. If taken in excess, however, it is very harmful, for it produces sleeplessness and nervousness. Children should never be allowed to drink tea, for it checks the development of the nervous system.

MARKETING

In order to buy economically and wisely one should know the products to be bought—their origin, grades, and service-ableness. There is no knowledge of food products that will not be of value in selecting foods for the table. In addition to this is the pleasure and the mental stimulation that comes from an acquaintance with the materials handled in cookery.

No amount of book instruction will take the place of first-hand knowledge obtained at the market or in the grocery store. To be able to handle the products, to see the different grades and prices, and to question the salesmen concerning them, gives value to the instruction given by the teacher and that obtained from books.

Weights and measures:

Most states have sealers of weights and measures or inspectors who test the accuracy of scales and of measures. Purchasers should make certain that they are getting just weight or full measure by noting whether the official stamp of the inspector is on the scales or measures.

The purchase of all vegetables and fruits by weight is much the fairer method and the tendency in state laws is to require sales and purchases to be made in that way. It would be well also if eggs were sold by weight. The state of Iowa has established by law a weight of 1½ lb. for a dozen hens' eggs.

In states allowing commodities to be sold by measure, small dry substances such as peas, beans, and seeds are sold by stricken measure; *i.e.*, the container is made level full. Larger substances such as potatoes, beets, carrots, and apples are sold by heaped measure. The heaped measure should hold about one-fourth more than the same article in stricken measure. It is because there is no accurate method of determining whether the measure of potatoes, for instance, has been heaped enough

to make a standard bushel of potatoes weighing 60 lb., that the sale by measure is discontinued in many states.

A standard U. S. bushel should contain 2150.42 cubic inches; one peck should contain one-fourth of this number of cubic inches. The quart for measuring dry substances should con-



A Stricken Bushel (Beans) Fig. 80 A Heaped Bushel (Onions)

tain one thirty-second of the number of cubic inches in a bushel. The liquid quart, which is one-fourth of a gallon of 231 cubic inches, should not be used in measuring dry articles.

The dry quart contains 67.2 cu. in. The liquid quart contains 57.75 cu. in. The dry quart is larger by 9.45 cu. in.

It is evidently a fraud on the purchaser to sell him peas, beans, berries, etc., measuring them by the liquid quart.

Berry boxes should be measured on the inside and the three dimensions multiplied together to see if they contain the required number of cubic inches. The bottoms of berry boxes are raised not for the purpose of defrauding the customer, but that the berries may not be crushed when the boxes are put one on top of another.

In order that dry measures may hold the amount that their cubical contents would indicate they must be of regulation size. A tall slim container would not hold a bushel even though it contained 2150.42 cubic inches. On that account the law provides that the inside dimensions of standard bushel basket must be as follows:

Diameter at top 17 inches
Diameter at bottom 16 inches
Depth $10\frac{1}{16}$ inches

Smaller standard measures of dry articles should be cylindrical in shape, and of the following dimensions:

	Diameter	Height
1 pint	4 inches	$2\frac{5}{8}$ inches
1 quart	$5\frac{3}{8}$ inches	$2\frac{15}{16}$ inches
½ peck	$8\frac{1}{2}$ inches	$4\frac{3}{4}$ inches
1 peck	$10\frac{7}{8}$ inches	$5\frac{3}{4}$ inches
½ bushel	$13\frac{3}{4}$ inches	$7\frac{1}{4}$ inches

Fruits and vegetables:

The family table should be supplied with a good variety of fruits and vegetables all the year round. Rapid transportation has made it possible to have fruits and vegetables that are "out of season" as far as the locality where they are bought is concerned, at a very slight advance in price on the home-grown product in season. Modern methods of canning also enable one to have canned vegetables and fruits that in many respects equal the fresh products.

Peas:

Peas are very valuable as a food chiefly because of the large amount of protein that they contain. They are used in America either fresh as taken from the pod, canned, or dried. In Europe a variety of pea is grown that has an edible pod and large quantities are used as we use stringed beans. The fresh peas as they are shelled from the pod, if they are young and tender, make a most delicious dish. When the peas get large and hard they are considered less desirable, although the older they become the greater is their food value.

Canned peas are used in large quantities all over the world. These are sold under many different brands. They are definitely graded by the canners according to the size of the pea. The smaller the pea the higher the grade. The most expensive peas come from France. Although the original flavor is retained by the French process of canning, the bright green color is produced artificially by immersing the green pea in a weak solution of sulphate of copper for five to ten minutes. In the process of canning peas in this country, the peas are passed over different sized sieves and are thereby graded for size. passing through a sieve the openings in which are $\frac{9}{30}$ of an inch in diameter are graded as No. 1 or "petits pois"; those passing through openings of $\frac{10}{32}$ of an inch in diameter are graded as No. 2 or "extra sifted"; those which pass $\frac{11}{32}$ inch openings are known as No. 3 or "sifted"; and the last or fourth grade pass through $\frac{12}{63}$ inch openings and are called "early June" peas. Peas too large for the sieves pass over the sieves and are called No. 5 or "marrowfats."

Dry, evaporated, and "split" peas are exceedingly nutritious and each year sees an increased use of this product. The protein content is almost as great as that of meat, and they have more fats and carbohydrates than meat ordinarily has. When dry peas are prepared for the table, the cooking should be preceded by soaking them for eight to ten hours, during which time they will absorb water to make up for that lost by the drying process.

Beans:

This vegetable is almost as nutritious as peas and occupies a very important place in the dietary of all nations.

There are two great classes of beans; viz., those that have tough pods and those that have edible pods. The tough-podded

beans include most of those found in the market — Navy Beans, Kidney Beans, Marrow Beans, and Black Beans. To the "edible podded" beans belong the "wax" beans or "butter" beans which when green make a fine dish, the pods and beans being eaten together. "String" or "snap" beans are varieties of the kidney bean, belonging to the "tough" class, but when the pods are young and brittle they are eaten the same as wax beans. String beans should be marketed immediately after picking and should be used before they wilt. Test them by breaking. If they break with a "snap" they are in good condition. Although they are called string beans, they should have no strings until they are so old that their pods are too tough to be eaten. The best canned string beans are described as "stringless."

Potatoes:

Lessons 3, 4, and 5 contain important information concerning potatoes. It is difficult to describe all the varieties of potatoes as they appear on the market. As sold by wholesalers they are often classed as Burbanks, Round Whites, Reds, and Mixed Reds and Whites.



Fig. 81 Common Scab on Potato

Burbanks are usually large, flattened, long potatoes. They bring the highest prices in the market. Round Whites, as the name indicates, are round white potatoes; they are medium-sized and include the varieties of the Rural New Yorker, sometimes shortened to Rurals. The Reds are usually made up of early potatoes such as the Early Rose, and the Mixed Reds and Whites are mixtures of these varieties. Mixed Reds and Whites bring the lowest price on the market. For immediate use, however, they are probably as good as the higher priced grades.

Potatoes should be stored in a dark, cool, well-ventilated

cellar, and the long-keeping varieties (late potatoes) only should be put away for winter use.

In selecting potatoes for winter use, choose a sound potato at random from the lot, cut it in two, and examine the exposed surfaces. Notice whether there are any dark streaks through or around the potato. If so, they indicate "brown rot" or some other fungus disease, and such potatoes should be rejected.



Fig. 82.— Brown Ring Discoloration on Potato, caused by the Fusarium wilt. Slices at left show Fusarium dry rot which follows the wilt or injuries.

Squeeze the pieces of potato slightly and if drops of water run off the exposed surface, the potato will not cook well but will be soggy. It may have been dug before the potato was thoroughly ripened.

The color should be white with slightly yellowish tinge. If it is yellow, the potato is not likely to cook well.

Potatoes should be free from any green color. This is caused by exposure to the sun which develops a poison in the potato.

Sweet potatoes do not belong to the same family as the common or "Irish potato," but the root has about the same composition

as the potato tuber, except that it has about 10 per cent of sugar, which gives it a decidedly sweet taste.

Sweet potatoes should be handled with great care. The slightest bruise will spoil the whole potato. They are difficult to hold in storage, as the temperature must be held at a uniform point not lower than 60 degrees and not higher than 70 degrees.

The yam is a variety of large sweet potato, the flesh of which

is somewhat coarser and less palatable than the ordinary varieties. The large "moist" sweet potatoes are often called yams, though incorrectly. The "dry" or "mealy" sweet potatoes are usually considered the best. These come from the South.

Tomato:

The tomato belongs to the same botanical family (the Night-shade or Solonacae) as the potato. So closely are they related that it is possible to graft the tomato stem on to the potato plant and have growing tomatoes above and



Fig. 83.— Tomatoes
Upper — Larger and medium varieties
compared.
Lower Right — Yellow tomato, small
variety.
Lower Left — Husk tomatoes (ground
cherries).

potatoes below the ground on the same plant.

For a long time tomatoes were considered poisonous, but now they are highly esteemed as a wholesome food. In southern Italy, where the tomato is popular, it was called the Golden Apple, and in France, England, and America it was called the "Love Apple."

Tomatoes vary in size from tomatoes the size of a cherry to tomatoes so large that they weigh two or three pounds.

The best tomatoes for canning and for ordinary table use are those of medium size with well-fleshed, mostly solid, interiors, round and smooth on the outside.

The ground cherry or husked tomato is an interesting variety of tomato. It grows in many forms, and although it is about the size of a cherry, it varies in color from deep red to green and grows in clusters so that it has various names such as "Strawberry," "Currant," and "Grape."

Lettuce:

The lettuce is of Greek origin and has occupied the most important place as a salad plant for more than four centuries.



Head Lettuce

Fig. 84 Curled Lettuce

Plain Leafed Lettuce

Leaf lettuce may be plain or curled. It is used as a garnish and with vinegar as a salad. Head lettuce or cabbage lettuce is most used as a salad. The heart with proper dressing furnishes a simple but delicious salad. Lettuce should not be exposed to the sun after gathering, and should be kept in a cool place. If the inside leaves have a reddish tinge, the lettuce has been kept too long.

Cabbage:

This vegetable is grown in many forms and may give great variety to a meal. Cabbage may be boiled or fried, used as a mixture with other vegetables for salads, or used alone chopped fine. Sauerkraut is made by shredding and pickling cabbage. Buy cabbages that are bright in color and crisp. If the head feels hard and solid, that is an indication of good quality.

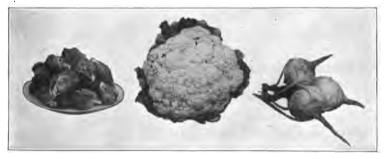


Fig. 85 Kale

Cabbage

There are two varieties — early cabbage and late cabbage. The late cabbage may be kept in cold storage, in pits, or in cold cellars till late in the winter.

Kale is a variety of cabbage in which the leaves form open heads. They are often very curly and beautifully patterned. They are used chiefly as a garnish or for greens.



Brussels Sprouts -

Fig. 86 Cauliflower

Kohl-rabi

Cauliflower is a kind of cabbage in which, by cultivation and seed selection, the flower buds and stalk have become enlarged so that it is a valuable vegetable. It is served chiefly as creamed

cauliflower or as a pickle. It is kept in the same manner as the ordinary kind of cabbage described above.



Fig. 87.—Salsify (Vegetable Oyster)

Kohl-rabi is a cabbage with the stem just above ground thickened to about the size of a turnip. The leaves, when young and tender, may be eaten for greens. The thickened stem is peeled, sliced, boiled, and served with cream sauce.

Brussels Sprouts originated in Belgium. It is one of the varieties of cabbage. It has a long stalk to which a number of small cabbages, about an inch in diameter, are attached. These sprouts are quite solid, but when cooked are tender and have a flavor somewhat like cauliflower.

Salsify or oyster plant:

This vegetable, when cooked, has a flavor somewhat like oysters. It is grown for its long, tapering root, which is white

and fleshy and contains a milky white juice.

All parts of the plant are edible. The young tops may be used like asparagus. The white part of the stem and top leaves may be used for salad, but the root is the part for which the plant is chiefly grown. This may be partly boiled, sliced, and fried in fat, or it may be stewed and creamed.



Fig. 88.—Celery

Celery:

Celery belongs to the parsley family. The long stem, which is blanched white by pulling the earth up around the plant while it is growing, is the part used for food. The stems when served should be white and crisp. Celery hearts are especially

crisp and make a very delicate dish. The tops are used for garnishing and for flavoring broths. The region about Kalamazoo, Michigan, furnishes some of the finest celery that comes to the market.

Celery may be kept for a month or more in a cool cellar if the plants are wrapped in paper; or it may be packed in boxes



Fig. 89.— Table Beets

with the tops up and covered with moist sand.

Beets:

Beets are one of the most important root foods. The coarse mangel wurzel is used as a stock food. A large part of the world's



Fig. 90 Mangel Wurzel, Beets, Chard

sugar is produced from the sugar beet. The small red table beet is used in making pickles, or is baked or boiled as a side-dish.

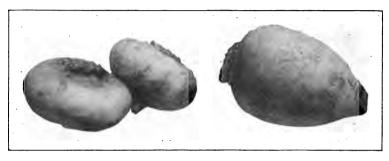
Beets may be kept in a cool cellar or kept cool by covering them with sand. This prevents wilting and shrinking.

Chard. Although the tops of beets may be used for greens when they are young and tender, the chard is a variety of beet that is grown for this special purpose. The mid-ribs are quite thick and may be prepared and used as asparagus.

Carrots:

The carrot is a vegetable grown chiefly for its root. The small table variety is used as a side-dish and in giving color and variety to various vegetable salads. The larger, coarser varieties are used as feed for stock.

Carrots may be kept in root cellars or in cold storage. If they are kept in a cellar, it is best to cover them with sand and



. Fig. 91

Turnips Rutabagas

not to pack very many together. When buying carrots, see that they are firm to the touch and crisp. Test their crispness by breaking them.

Turnips, rutabagas:

Turnips and rutabagas are different varieties of the same plant. Turnips are white-fleshed and rutabagas are yellow-fleshed. The medium-sized turnips are the best to use for the table. They are used in stews mixed with other vegetables, or mashed or sliced as a side dish.

Coffee:

Some prefer an unblended coffee of a certain variety; others prefer a blend made by mixing a number of varieties to give just the effect desired. One might, for instance, take *Burbon* for the acid, add straight Santos for body, and Bogota for body and aroma, and get a very desirable blend. The proportions

of each might be determined by testing cups made with the coffees in different proportions.

Coffee is often adulterated with chicory, the prepared root of the chicory plant, and with various parched cereals. Such adulterants may be detected by putting a teaspoonful of the ground coffee into a cup of cold water. If it is pure coffee, it will all float. Any particles sinking are adulterants. These adulterants are usually harmless. In England and France it is thought that coffee is greatly improved by the addition of chicory, from 10 to 30 per cent being added.

Coffee is served in many ways.

French Breakfast Coffee, Café au lait means strong coffee served with boiling hot milk, usually half coffee and half milk.

Black Coffee, Café noir is usually served as an after dinner coffee. It is very strong and many prefer to drink it "clear."

Café demi-tasse means a small cup of coffee served usually after the rest of the dinner.

Adding plain or whipped cream to Café noir makes Café à la Crème.

Vienna Coffee is served with whipped cream and is made by passing the steam through the coffee frequently so that the aroma may be retained.

Creole Coffee is made by percolating the coffee very slowly. At intervals of five minutes boiling water is poured over the freshly ground coffee in the filter. A very strong liquor is thus obtained. It may be kept in an air-tight bottle and used to make coffee as required. A teaspoonful to a cup of hot water may be sufficient.

Turkish Coffee is not allowed to boil but is made by adding cold water to powdered coffee. When served it is warmed but not strained.

Dutch Coffee is prepared by percolating cold water through pulverized coffee. The process takes about four hours and produces a coffee of great strength.

Coffee is usually bought from the store in cans or sealed

packages. A coffee house has made a blend or mixture that appeals to the taste of the blenders and then it is advertised and the public is induced to buy. This usually gives a uniform product and saves considerable trouble to the purchaser. If one had the time and convenient apparatus to roast and grind the coffee the same quality could be obtained at about half the cost.

The names of the different classes of coffee are derived from the names of the places from which they are supposed to be shipped — Mocha coffee, coming from Mocha in Arabia; Java coffee, coming from the island of that name in the East Indies; and Rio coffee, coming from Brazil. Formerly there was much deception in naming coffees. Any small coffee bean was called Mocha, regardless of its origin. This may be readily seen to be the case inasmuch as five times as much Mocha coffee was sold in the United States as was shipped from Mocha. The pure food laws have stopped this abuse and now require accurate labeling of coffees sold, whether separate or in blends.

Brazil produces more coffee than any other country. The best known varieties from this country are the Rio, the beans of which are heavy in body and strong in flavor, and the Santos, the beans of which are milder than the Rios and give a smooth and pleasing flavor. Burbon Santos coffee has a small bean and an acid flavor. It was often sold for Mocha.

Columbia is growing in importance as a coffee producing country. Bogota and Bucaramanga are the best known Columbian coffees. Bogota is the basis of a number of high-priced blends.

Bucaramanga coffee is especially valued for its fine aroma. Mexico produces some very fine coffee. The Tepic, which is said to be developed from a Mocha shrub, was formerly called Mexican Mocha and makes a very fine, aromatic coffee.

Mexican Pea Berry is a variety produced from a shrub that produces a small berry resembling a pea. This coffee is considered of the highest class and very little of it is exported.

Many other varieties are exported from Mexico under the general term Mexican Coffee.

Java and other East Indian islands produce coffees that have long been standards of excellence; the largest quantity comes from the island of Java and is known as "Java."

Arabia produces the coffee known as Mocha, named from a shipping point once of some importance, but now little used. The true Mocha bean is small and round. The coffee made from it is creamy, rich, a little acid, and very fragrant.

A number of years ago the blend known as "Best Java and Mocha" was considered the best that the world produced in coffees. Many other localities have produced coffees equally as good, and blends of these other coffees now seem to be even more popular than blends of Mocha and Java.

Measuring

There may be—in fact, evidence proves that there are—good cooks who seemingly never measure anything, but by "about so much of this," and "a pinch of that," bring about results so delicious that the would-be follower at once determines to throw rules to the winds and try the same way. Good cooks always measure—one by the cup and spoon, because she must; another by the judgment and experience long years of doing the same thing over and over again have given her; and the chances are that, unless you have the rare gift of cooking straight from the gods, you would better cling to exact measures and weights if you wish the best result every time, instead of once in a while.

64 drops	=1 teaspoon
4 saltspoons liquid	=1 teaspoon
3 teaspoons	
3 teaspoons dry material	= 1 tablespoon
4 tablespoons of liquid $\dots \dots \dots \dots $ =	= 1 wine glass
4 tablespoons of liquid	=⅓ gill
(=	= 1 cup
16 tablespoons of liquid	=1 cup
16 tablespoons dry material	=1 cup
8 heaping tablespoons dry material	=1 cup
4 cups liquid	=1 quart
4 cups flour	=1 quart
4 cups flour	=1 pound
2 cups solid butter	=1 pound
½ cup butter	= ½ pound
2 cups granulated sugar	
2½ cups powdered sugar	=1 pound
1 pint milk or water	=1 pound
9 large eggs or 10 medium	=1 pound
1 round tablespoon butter	=1 ounce
1 heaping tablespoon butter	
1 heaping tablespoon butter	= 1 cup
1 heaping tablespoon sugar	=1 ounce
2 round tablespoons coffee	=1 ounce
1 tablespoon liquid	= ½ ounce
butter size of egg	=2 ounces
butter size of egg	= 1 cup

GLOSSARY

albumen, the white of an egg.

alkaline, having the power of forming salts with acids.

aluminum, a bluish, silver-white metal, noted for its lightness.

artichokes, aster-like plants, the flower-bracts and receptacles of which are used for food.

assimilation, the process by which the nutritive material which is taken as food is changed to the substance of the body.

baking, cooking by dry heat.

baste, to moisten with melted fat or other liquid to prevent burning and to add flavor.

batter, a mixture of a starchy, dry ingredient and a liquid.

beaten "dry," said of the whites of eggs when they are beaten so much that little flakes are thrown off.

beaten "stiff," said of the whites of eggs when beaten until they do not run when inverted.

binding, a mixture of flour and butter added to a soup to thicken it.

bisque, a thick, rich soup made of shellfish, birds, or rabbits.

blanch, to make nuts white by removing the skin by scalding.

blanc mange (bla mänzh'), a dessert made of gelatin or cornstarch and milk.

blow end, the blossom end of fruit.

boiled dressing, a cooked salad dressing made of sugar, vinegar, butter, eggs, salt, pepper, and mustard.

boiling, cooking in hot water.

bolted flour, flour sifted through bolting, a silk cloth.

borax, a crystalline salt used as a cleansing agent.

braising, stewing or broiling in a covered kettle or pan.

brick tea, a kind of tea made by grinding, steaming, and pressing tea leaves in a mold.

Brie, a kind of soft cream cheese made in Brie, France.

brisket, the breast or lower part of the chest of animals in front of and between the fore legs.

brussels sprouts, a variety of cabbage, flavored like cauliflower.

butter cake method, a method of mixing ingredients in which the butter and sugar are first creamed; then eggs are added, then flour and milk alternately.

café noir (cä' fe' nwôr), black coffee, that is, coffee without cream.

caffeine (caf' e in), a stimulating compound found in coffee and tea.

Camembert (Cà'man'bâr'), a soft, unpressed cream cheese.

caramel, burnt sugar.

carbohydrates, compounds composed of carbon, hydrogen, and oxygen.

casein (eā'se ĭn), the proteid of milk.

cassava (ea să'va), a plant, manioc, having fleshy rootstocks, which yield a nutritious starch.

casserole, a baked dish of meat or vegetable combined with bread or cracker crumbs.

caustic, burning, corroding.

caviare (eav'i are'), the salted roe of the sturgeon or other large fish.

Cayenne (Cā ĕn'), red pepper.

cellulose, the paper-like substance composing the walls of animal and vegetable cells.

cereals, grains.

chowder, a dish made of fresh fish or clams, biscuit and onions stewed together.

coagulate, to curdle or clot.

composite, a food composed of ingredients having different food values.
compote dish (εŏm'pōt), a fancy dish for holding a mold of jelly or other relish.

condiment, something used to season food.

corer, a utensil used for removing the core from apples.

cottolene, a product of cottonseed used as lard.

cream, to rub or beat butter until it is creamy.

cream soup, the strained pulp of a vegetable combined with milk and a binding.

croquettes, fried balls made of minced meat, fowl, rice, or other ingredients. crouton (ero ton'), a small cube of toasted bread.

curdle, to thicken.

curd, the coagulated, or thickened, part of milk.

cut in shortening, to mix lard or butter with flour by means of a knife. denatured, having the nature changed.

desiccated, preserved by drying.

dessert (de şērt'), a service of fruits or sweetmeats at the close of a dinner or luncheon.

diced, cut into small cubes.

dietary, pertaining to the diet.

doily, a small ornamental piece of linen or lace, usually round.

double boiler, a cooking utensil consisting of two covered basins, one inside the other.

Dover egg beater, an egg beater operated by means of a wheel and a crank.

dredge, to sprinkle with flour.

drippings, the fat that is left from cooking meat.

drop batter, a batter thick enough to break from the spoon when held suspended.

Edam, a Dutch pressed cheese made in balls.

edible, fit to be eaten.

entrée (än'tre), a side dish.

extension sieve, a sieve with sliding wires on either side to serve as a support.

fibrous, consisting of fibers, or like fibers.

filtered, strained through cloth, paper, sand, or charcoal.

firm custard, custard cooked without stirring.

fold in, to combine the beaten whites of eggs with a batter without beating.

fondue, a dish made of cheese, eggs, butter, and seasonings.

French dressing, an uncooked salad dressing made of olive oil, vinegar, and seasonings.

fricaseeing, stewing fowls or other meat cooked in a gravy.

fudge, a kind of soft candy made of milk, sugar, and chocolate or maple sugar.

garbage, waste animal or vegetable matter.

garlic, a plant resembling the onion.

garnishing, something put on or around a dish of food for ornament.

gas plate, a simple plate attachment connected with the gas pipe and used for cooking.

gelatin, animal jelly.

glazed, covered with a coating of white of egg or melted sugar.

gluten, a nutritious element of food found in flour.

Graham flour, unbolted wheat flour.

hominy, maize hulled and broken for food.

junket, a cream cheese, or curds and cream, sweetened and flavored.

leavening agent, something added to a batter to make it light.

legume, a plant like the pea and bean.

lentil, a plant with flattened, lens-shaped seeds which are cooked like peas or beans.

lime water, a water solution of slaked lime used in medicine.

liquid custard, a custard stirred constantly while cooking.

lukewarm, neither hot nor cold.

macaroni, a paste made of wheat flour and dried in long, slender tubes.

marinate, to soak for a time in oil or vinegar.

marjoram (mär'jo ram), a mint used for flavoring.

masticate, to chew.



mayonnaise (mā'o nāṣ'), a thick salad dressing made of raw yolks of eggs beaten with oil and vinegar, and seasonings.

meringue (me rang'), a composition of powdered sugar and beaten whites of eggs, used on puddings, pies, and fruits.

Neufchatel (Nû'çha těl'), a kind of soft white cheese made from sweet milk.

neutralize, to destroy the effect of.

nougat (noo'ga), a kind of candy made with nuts stirred into a sugar paste.

oleomargarine (ō'le o mär'ga rēn), a substitute for butter made of beef suet, lard, and cottonseed oil.

omelet, a dish consisting of eggs beaten up with milk or water and then cooked in a frying pan.

omelet pan, a light-weight oval or round frying pan.

paprika (pä'pri ka), the dried ripened fruit of the pepper plant.

paraffin, a waxy substance, used in making candles, preserving food, and so forth.

parboil, to boil until partly cooked.

pasteurize, to check or prevent fermentation in fluids.

pastry, food having a crust made of paste.

peanut butter, a paste made of ground peanuts and water.

pilaf (pi läf'), rice boiled with meat, fowl, or fish.

pimento, allspice.

pinoche (pi nō'che), a kind of soft candy made of brown sugar, usually with nuts.

pinon (pē nyōn'), a pine-producing, edible seed.

pistachio (pis tā'chi o), a tree of southern Europe having a greenish seed.

poach, to cook (an egg) by breaking (it) into boiling water.

pour batter, a batter thin enough to pour.

proteid, a food containing carbon, hydrogen, oxygen, nitrogen, and sulphur, and often phosphorus and other elements.

purée (pü're'), a thick cream soup.

ramekin, an earthen dish for baking various foods prepared with bread crumbs.

rancid, having a rank taste.

refining, freeing from impurities.

relish, something taken with food to render it more palatable.

rennet, the lining of the stomach of a calf, used for curdling milk.

ricer, a utensil for preparing mashed potatoes for the table.

Roquefort (Rök'för'), a highly flavored, blue-molded cheese, made from the milk of ewes and cured in caves.

saccharine, a coal-tar product remarkable for its sweetness.

salsify (săl'sĭ fỹ), a plant the root of which tastes like oysters; vegetable oyster.

samovar, a metal urn used for making tea.

sauté (so'te'), to cook in a little fat.

scalloped, baked with cracker or bread crumbs.

scrambled (eggs), eggs cooked with milk.

service plate, the plate upon which the plates of the courses of a dinner (except the last course) are placed.

shortening agents, materials added to a batter to make it tender.

sieve, a utensil with a fine mesh wire, used for sifting.

silence cloth, a thick pad or cloth laid under a table cloth.

simmer, to cook slowly in water without boiling.

sirup (sĭr'up), a thick, sticky liquid.

skewer, a wooden or metal pin for keeping meat in form while roasting. skimmer, a utensil to clear scum from a liquid.

soggy, heavy and wet.

soluble, that may be dissolved in liquid.

spaghetti (spa get'tĭ), a kind of macaroni made into smaller tubes.

spatula, a flexible, thin-bladed knife.

spinach (spin'āj), an herb cultivated for its leaves, which are eaten boiled. stale, not freshly made.

steaming, cooking by placing over boiling water.

sterilized, rendered free from bacteria by heat or by chemicals.

tannin, a strong acid found in tea.

tapioca, a coarse-grained preparation of cassava starch obtained by heating it while moist.

theine (the'in), the same as caffeine.

tuber, a fleshy underground stem.

tureen, a large, deep dish to hold soup for the table.

utensil, an instrument used in the kitchen.

vegetable brush, a brush used for cleaning vegetables.

vegetarian, one who does not eat animal food.

vermicelli (vûr'me sël'î), a paste of a small grained wheat forced through small pipes till it takes a slender, worm-like form.

whey, the water part of coagulated milk.

wire whisk, a utensil for beating eggs.

Worcestershire (sauce) (Woos' ter sher), a highly seasoned relish used with meats.

yeast, a substance consisting of the cells of certain fungi, used as a leavening agent.



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